

**Stauffer Chemical Company and Robert W. Kirkconnell, Case 2-CA-17092**

July 29, 1982

**DECISION AND ORDER**

**BY CHAIRMAN VAN DE WATER AND  
MEMBERS FANNING AND HUNTER**

On September 8, 1981, Administrative Law Judge Eleanor MacDonald issued the attached Decision in this proceeding. Thereafter, the General Counsel, the Charging Party, and Respondent filed exceptions and supporting briefs; Respondent filed cross-exceptions; and all parties filed answering briefs.

Pursuant to the provisions of Section 3(b) of the National Labor Relations Act, as amended, the National Labor Relations Board has delegated its authority in this proceeding to a three-member panel.

The Board has considered the record and the attached Decision in light of the exceptions and briefs and has decided to affirm the rulings, findings,<sup>1</sup> and conclusions<sup>2</sup> of the Administrative Law Judge only to the extent consistent herewith.

Respondent has excepted to the Administrative Law Judge's finding that Respondent maintained a rule prohibiting employees from contacting government agencies directly for information relating to occupational safety and health standards in violation of Section 8(a)(1) of the Act. We find merit in Respondent's exceptions.

The facts, as more fully set forth by the Administrative Law Judge, are as follows: Respondent manufactures chemicals at its facilities throughout the United States and the world. Respondent's Environmental Engineering Department, located in Dobbs Ferry, New York, regularly sends its engineers to the various manufacturing facilities to provide onsite environmental engineering services, including the design of pollution control devices. Respondent's manager of Environmental Engineering, Seymour Friedman, testified without contradiction that the Environmental Control Department,

headed by Ed Conant, was responsible for the interpretation of Environmental Protection Agency (EPA) regulations that the engineers from Environmental Engineering used in their designs. Sometime in 1975, Conant complained to Friedman about the environmental engineers' contacting government agencies and obtaining interpretations of the regulations. Friedman and Conant came to an "understanding" that, in order to avoid confusing interpretations, Environmental Control would make all the contacts. Friedman then reported to his engineers that they were not to contact agencies directly for information about the regulations and that they would have to go through Environmental Control.

On June 3, 1975, Friedman issued an interoffice memorandum entitled "Contacting Pollution Authorities" to his engineers, including Robert Kirkconnell, the Charging Party here. The memorandum, which Respondent concedes is still in effect, reads in pertinent part as follows:

Once again let me remind you that Stauffer Corporate procedures dictate who should contact the pollution authorities in reference to Stauffer's Environmental Affairs. It is the function and concern of the Environmental Control Department to make contact with any pollution control authority, be it State, Federal, county, local or otherwise.

There are occasions when Environmental Control may request one or more of us to contact a particular pollution control authority. In that case, please inform me first that the request has been made . . . .

Occasions may arise when other departments within Stauffer (Law, Manufacturing, etc.) may request you to contact pollution authorities. When this occurs, please contact me before communicating with these authorities.

The record indicates that no similar understanding or procedure was in effect between Environmental Engineering and Respondent's Industrial Hygiene Department, which is responsible for monitoring employee exposure to hazardous substances and for Occupational Safety and Health Administration (OSHA) regulations.

In January 1977, Kirkconnell was performing onsite tests at Respondent's Le Moyne, Alabama, facility in conjunction with a project to remove organic waste from effluent water. While running tests at a pond where waste streams converged, Kirkconnell noted the presence of hydrogen sulfide, a toxic gas, and felt some physical effects from it. Kirkconnell and another engineer then took samples and obtained readings of the level of

<sup>1</sup> The General Counsel and the Charging Party have excepted to certain credibility findings made by the Administrative Law Judge. It is the Board's established policy not to overrule an administrative law judge's resolutions with respect to credibility unless the clear preponderance of all of the relevant evidence convinces us that the resolutions are incorrect. *Standard Dry Wall Products, Inc.*, 91 NLRB 544 (1950), enf'd. 188 F.2d 362 (3d Cir. 1951). We have carefully examined the record and find no basis for reversing her findings.

<sup>2</sup> We adopt the Administrative Law Judge's dismissal of the allegation that Respondent violated Sec. 8(a)(1) of the Act by discharging employee Kirkconnell. However, we find it unnecessary to reach the legal issues involved in *Alleluia Cushion Co., Inc.*, 221 NLRB 999 (1975), regarding whether or not certain conduct constitutes protected concerted activity since the Administrative Law Judge found in this case that Kirkconnell did not in fact make any complaints about employee safety as the Le Moyne, Alabama, project progressed to completion or refuse to perform work because of any fears for employee safety.

hydrogen sulfide at different sites. Kirkconnell asked two plant engineers for the permissible level of employee exposure, but was dissatisfied with their estimate. Kirkconnell then contacted the National Institute for Occupational Safety and Health (NIOSH), which is the research arm of OSHA, and found that the standard was as the plant engineers had estimated. Several days later, according to Kirkconnell, Friedman reminded him that he was not to contact regulatory agencies under any circumstances and that he was to go through Environmental Control. Friedman had no specific recollection of this incident but acknowledged that he "undoubtedly" told Kirkconnell to go through channels and not to contact the agency directly.

Based on Friedman's and Kirkconnell's testimony, the Administrative Law Judge found that Respondent, by virtue of the June 3, 1975, memorandum, maintained a rule prohibiting employees from contacting government agencies directly for information, including information about occupational safety and health standards. She found, relying on *Alleluia Cushion Co.*, *supra*, that the rule had the broad and unlawful effect of barring employee communication with occupational safety and health agencies for any reason. She also found that the rule impermissibly conditioned the exercise of the employees' Section 7 right to protect the safety of the workplace on obtaining the Employer's permission. Finally, she rejected Respondent's asserted justification for the rule, finding that Respondent had not shown that, if its employees contacted government agencies directly to obtain occupational safety and health standards, confusion or other harm to its business would result.

Contrary to the Administrative Law Judge, we do not find that Respondent maintained a rule in violation of Section 8(a)(1). Thus, we find that Friedman's June 3, 1975, memorandum, read in its entirety, is valid on its face. In so finding, we note that the memorandum was issued only to the environmental engineers, who had to allow for environmental regulations in their designs; that it referred specifically to contacts with "pollution control authorities," not occupational safety and health authorities;<sup>3</sup> and that it dealt with requests to contact pollution control authorities coming from other departments. We further note that Respondent in 1978 sent two letters to all salaried employees, including the environmental engineers, concerning internal and statutory reporting requirements, which the Administrative Law Judge found,

and we agree, did not prohibit employees from contacting government agencies regarding occupational safety and health matters. Based on the foregoing, we find that the memorandum, on its face and considered in context with the other memoranda, was not overly broad, but rather merely outlined the procedure whereby the environmental engineers could obtain work-related information about pollution control regulations.

Furthermore, we find, contrary to the Administrative Law Judge, that Friedman's remarks to Kirkconnell following the latter's telephone call to NIOSH in 1977 do not establish that the memorandum was considered applicable to employee requests for information on occupational safety and health standards. Thus, it is not clear from the record whether Kirkconnell's call to NIOSH for the hydrogen sulfide standard was in furtherance of his job responsibilities or was an attempt to enforce the standard in connection with a personal safety concern. Moreover, even if Kirkconnell's call to NIOSH were to be construed as such an attempt, we note that there is no showing of any subsequent application of the rule to employee contacts with occupational safety and health agencies and that Friedman's statement to Kirkconnell not to contact government agencies directly was an isolated remark occurring several years prior to the filing of the instant charges. Therefore, we do not find that the 1977 incident is sufficient, in itself, to establish that the rule, which we have found valid on its face, was otherwise unlawful.

Finally, we find that Respondent has demonstrated a legitimate and substantial business justification for its rule. In this regard, the record indicates, *inter alia*, that the Environmental Control Department had the primary responsibility for obtaining information on, and interpreting, EPA regulations; that the Environmental Engineering Department's engineers used such information in their designs; that the head of Environmental Control complained to Friedman about the environmental engineers' contacting government agencies and obtaining interpretations of the regulations; and that the rule operated to establish an orderly way of obtaining work-related information.

In view of the particular facts of this case, and for all of the foregoing reasons, we conclude that the General Counsel has not proved by a preponderance of the evidence that Respondent maintained a rule prohibiting employees from directly contacting occupational safety and health agencies

<sup>3</sup> In this regard, we find it significant that, as noted above, Respondent's separate Industrial Hygiene Department had primary responsibility over worker exposure to hazardous substances and compliance with occupational safety and health regulations.

in violation of Section 8(a)(1) of the Act.<sup>4</sup> We therefore shall dismiss the complaint in its entirety.

### ORDER

Pursuant to Section 10(c) of the National Labor Relations Act, as amended, the National Labor Relations Board hereby orders that the complaint herein be, and it hereby is, dismissed in its entirety.

<sup>4</sup> In view of our decision herein, we find it unnecessary to pass on the Administrative Law Judge's citation of *Alleluia Cushion Co.*, *supra*, as authority for her finding that Respondent maintained a rule in violation of Sec. 8(a)(1).

### DECISION

#### STATEMENT OF THE CASE

ELEANOR MACDONALD, Administrative Law Judge: This case was heard in New York, New York, on 19 days between October 1 and October 31, 1980. The amended complaint, based on a charge filed by Robert W. Kirkconnell, alleges that, in violation of Section 8(a)(1) of the Act, Respondent Stauffer Chemical Company discharged Kirkconnell because he "concertedly complained to Respondent regarding the safety, health and related working conditions of Respondent's employees," and that Stauffer has "maintained and promulgated a company rule and policy which prohibits employees from directly contacting Federal or State governmental agencies concerning matters of health and safety relating to their employment." The complaint alleges that Respondent has thereby discouraged employees from engaging in concerted activities for the purpose of collective bargaining or other mutual aid or protection. Stauffer filed an answer denying the material allegations of the complaint and alleging that Kirkconnell was a supervisor and was discharged for cause.<sup>1</sup>

Upon the entire record, including my observations of the demeanor of the witnesses and after due consideration of the briefs filed by the parties, I make the following:

#### FINDINGS OF FACT

##### I. JURISDICTION

Stauffer Chemical Company is a Delaware corporation engaged in the manufacture and nonretail sale and distribution of chemicals and related products with an office and place of business, *inter alia*, at Dobbs Ferry, New York. In the course and conduct of its business, Respondent annually sells and ships from its facility described above products, goods, and materials valued in excess of \$50,000 directly to points outside the State of New York. Respondent admits, and I find, that it is an employer engaged in commerce within the meaning of Section 2(6) and (7) of the Act.

<sup>1</sup> Respondent's allegation that the charge was not timely served was withdrawn at the hearing.

## II. THE ALLEGED UNFAIR LABOR PRACTICES

### A. Background

Kirkconnell, who holds a bachelor's degree in chemical engineering, was hired by Stauffer in August 1974, as a senior associate engineer in the Department of Environmental Engineering located in Dobbs Ferry, New York, the site of Stauffer's Eastern Engineering facility.<sup>2</sup> From time to time, Kirkconnell was assigned certain engineering problems to be solved at Stauffer's various facilities located throughout the United States. His specialty was the treatment of water for the purpose of removing chemicals or other unwanted components from water which had been utilized by or contaminated by Respondent's manufacturing processes. Kirkconnell's services were also used on a consultant basis by other employees of Stauffer.

The instant case arises mainly from Kirkconnell's assignment in May 1978 to develop alternative treatment schemes for polluted groundwater located below the surface of Stauffer's Le Moyne, Alabama, facility. It was the intention of Respondent to pump the water to the surface, remove pollutants from the water, and then discharge the treated water. Kirkconnell's task was to study methods of treatment and disposal of the water. Pumping the groundwater to the surface where it could be treated was the responsibility of the Le Moyne plant geology department. The General Counsel alleges that Kirkconnell's actions in carrying out this assignment in such a manner as to preserve the health and safety of Stauffer's employees at the Le Moyne plant led to his unlawful discharge on August 20, 1979.

A summary of the General Counsel's position will serve as an aid to understanding the lengthy and complex testimony discussed below. In brief, the General Counsel maintains, the testimony of Kirkconnell shows that Stauffer was more concerned with holding down costs than with safely treating and discharging the groundwater at Le Moyne so as not to endanger the health of employees, and that Kirkconnell was prevented from carrying out sufficient tests and studies fully to evaluate and design an appropriate and safe water treatment method.<sup>3</sup> Kirkconnell testified that he was not permitted to obtain the applicable safety and health standards and regulations directly from Government authorities and that, despite his repeated requests therefor, no Stauffer employee ever furnished him the safety and health standards he required to determine the legal parameters governing his work. Kirkconnell testified to several incidents which allegedly demonstrate Respondent's lack of concern for the health of its employees and

<sup>2</sup> Although Respondent claimed that Kirkconnell held supervisory status, the evidence showed that Kirkconnell had no supervisory duties or authority whatsoever.

<sup>3</sup> In particular, the General Counsel alleges that despite repeated requests by Kirkconnell to obtain accurate data on the average contamination of the groundwater so that he could accurately calculate expected levels of pollution at the treatment site, Respondent denied Kirkconnell's request to pump the observation wells which would have provided the necessary data. It is evident that the greater the contamination of the groundwater, the greater will be the expected levels of pollutant extracted during treatment of the groundwater.

Respondent's alleged proclivity to endanger the safety of its employees.<sup>4</sup> Kirkconnell testified that after being gassed by chlorine gas and after suffering injury therefrom in September 1978, Respondent caused him to falsify a medical report about the incident in order to obtain reimbursement for medical expenses. Kirkconnell testified that in May 1979 he was ordered to destroy files containing environmentally sensitive material, and that in July 1979 he was told that henceforth sensitive material concerning the environment should no longer be included in reports and memoranda. Kirkconnell testified that the method of treating and discharging the groundwater was determined arbitrarily in October 1978 without regard to his findings, and that almost 1 year later, in August 1979, the method was again changed. Despite the change however, Kirkconnell was not given sufficient time to perform work required to study the new method before a new report was demanded of him, and a date was set for issuance of the report without consulting or informing him. Kirkconnell's testimony suggests that because he expressed safety concerns to his superiors during the course of the groundwater project and refused to submit an unsafe design, he was ultimately given many tasks to perform in an impossibly short time; when he did not complete these tasks, he was discharged.<sup>5</sup>

#### B. The Le Moyne Groundwater Project

##### 1. Early stages of the project

Kirkconnell testified that in May 1978 he was assigned by Seymour Friedman, head of the Environmental Engineering Department, to work on a method of removing contaminants from the groundwater at the Le Moyne plant. Kirkconnell visited the plant and was given a rough chemical analysis of the groundwater as a data base by Gregory Heausler, then technical superintendent of the Le Moyne plant. One of the contaminants present in the water was carbon tetrachloride, (CCl<sub>4</sub>) which Kirkconnell described as a soluble, volatile, carcinogen. Heausler informed Kirkconnell that there were about 30 parts per million (ppm) of CCl<sub>4</sub> in the groundwater.

<sup>4</sup> At the outset, it is important to distinguish between the two sets of safety regulations which will be referred to in this decision. The safety of the environment, a matter affecting all those present in a geographical locality, is entrusted to the Federal Environmental Protection Agency (EPA) and to certain local authorities such as the Alabama Water Improvement Commission (AWIC). The safety of the workplace and the health of Stauffer's employees is under the jurisdiction of the Federal Occupational Safety and Health Administration (OSHA). The General Counsel's theory of the case—that Kirkconnell engaged in concerted activities for the mutual aid or protection of Stauffer employees—has reference only to Kirkconnell's attempts to safeguard the safety of the workplace. See *Alleluia Cushion Co., Inc.*, 221 NLRB 999 (1975). In *Alleluia Cushion*, the Board held that an employee who acts alone in making complaints about conditions affecting fellow employees to a governmental occupational safety agency, will be deemed to be engaged in protected concerted activity for mutual aid and protection within the meaning of Sec. 7 of the Act in the absence of evidence that fellow employees disavow the sole employee's efforts. Activities directed toward preserving the environment in general as distinguished from insuring a healthy and safe workplace for the benefit of employees are not dealt with by *Alleluia Cushion* and related cases.

<sup>5</sup> Kirkconnell also testified that he discussed his concerns for the health and safety of the employees with union representatives and rank-and-file employees of Stauffer.

On August 24, 1978, Kirkconnell addressed a memorandum to Friedman "to provide an interim position on alternate treatment schemes" for the polluted groundwater at Le Moyne. The memo stated that samples taken from a number of different wells over the past 5 years indicated an estimated concentration of 30 ppm of CCl<sub>4</sub> in the groundwater. The memo also described spray tests runs by Kirkconnell with water from well 029; this water had a CCl<sub>4</sub> content of 475 ppm. The advantages of spraying followed by ponding as a means of removing CCl<sub>4</sub> from the groundwater are described in the memo.<sup>6</sup> The disadvantages of ponding were stated to be:

1. The CCl<sub>4</sub> air contamination will be at a maximum of about 0.01 of a ppm. The regulatory 8 hour exposure level is currently at 10 ppm. A major fraction of the CCl<sub>4</sub> will be separated from the aqueous phase and disposed of into the air.

2. A very preliminary investigation of the related standards and regulations indicates that, if the mining law is applicable, there is a potential problem with excessive iron in the effluent. To circumvent this legal problem, the groundwater can be used as process water. Process water effluent is controlled with an NPDES permit which does not monitor soluble iron.<sup>7</sup>

Kirkconnell testified that he did not know the applicable regulatory standards for CCl<sub>4</sub> either when it was discharged into the air or dissolved in water. He made several verbal requests for the information, and finally incorporated his request into a memorandum dated August 31, 1978, addressed to Tom Sayers in the Stauffer Environmental Control Department. Kirkconnell testified that the memorandum did not result in his being supplied with the applicable regulatory standards and that no one in the Company ever gave him standards and regulations to govern his design.

The General Counsel introduced this memorandum into evidence. In it, Kirkconnell stated that the purpose of the memorandum was to bring the reader up to date on the status of the project to "get your best practical guesstimate [sic] of the standards and regulations we will probably have to meet. Your guidance will dictate the technical route we will follow with its related costs." The memorandum described generally some of the then current waste treatment facilities at Le Moyne stating that the quality of the plant's effluent is regulated by an NPDES permit. The memorandum stated that the critical pollutants at the plant are CCl<sub>4</sub>, carbon disulfide (CS<sub>2</sub>), chromium, mercury, zinc, iron, and thiocarbamates, and the memorandum posed four questions relating to possible alternative treatment schemes for the polluted groundwater: (1) the relationship between standards under the plant's existing NPDES permit and the

<sup>6</sup> Since CCl<sub>4</sub> is volatile, some of it will be discharged into the air as a vapor if water containing dissolved CCl<sub>4</sub> is exposed to air. The process is speeded up if the contaminated water is sprayed or if air is bubbled through the water. One of the components of the treatment methods being considered by Kirkconnell was the construction of a large pond into which the groundwater would be pumped or sprayed.

<sup>7</sup> This refers to a federally regulated permit for the discharge of water containing certain permissible levels of contaminants into a waterway.

Alabama Mining Law of 1962; (2) an estimate of effluent quality levels which would be required in an NPDES permit to cover discharge of treated groundwater; (3) an estimate of criteria for disposal of sludge created by treating the groundwater; and (4) a question concerning the feasibility of disposing of the pollutants by, essentially, evaporating them into the air. This last possibility is the controversy around which the instant case centers. Concerning this alternative, Kirkconnell's memo stated:

All the less expensive alternative treatment schemes utilize transfer of  $\text{CCl}_4$  from the aqueous phase to the gas phase (air) by spraying, passing over a cooling tower, stripping or ponding. The maximum  $\text{CCl}_4$  concentration, within property limits, is calculated to be about 0.01 ppm. I used the standard computer program for this estimate. The current 8 hr. exposure for  $\text{CCl}_4$  is 10 ppm. . . .

At this time the best overall treatment scheme appears to be a combination of spraying and ponding. The maximum concentration of  $\text{CCl}_4$  is estimated to be about 0.01 ppm at the pond. The location of the concentration would be 1/2 mile from the plant. Assuming the data to be accurate, what is your estimate of the overall plan to dispose of ground water pollutants to the air. Please consider today and some such day at 1985.

The memorandum stated that tests on the composition of the groundwater as well as on methods of reducing its contamination were being done on water obtained from "worst-case 029 well." Attached to the document were various tables and diagrams. These show, *inter alia*, that the "typical groundwater" was estimated to contain 25 ppm of  $\text{CCl}_4$ , although a graph of water taken from 029 well shows a raw concentration of 475 ppm. A map showed the location of various test wells drilled to observe the groundwater under the Stauffer Le Moyne plant, as well as on the adjoining property of Courtauld, and showed the location of the proposed pond for treatment of the groundwater.

Although Kirkconnell testified that he did not know the applicable standards and regulations for discharge of  $\text{CCl}_4$  to the air, it is clear from the above-described memorandum that he was in fact aware that "the current 8 hour exposure for  $\text{CCl}_4$  is 10 ppm."<sup>8</sup> In the memorandum, Kirkconnell was thus requesting information whether the estimated maximum concentration above the pond treatment site of 0.01 ppm was compatible with any changes in regulations anticipated to be in effect by 1985. (Indeed, on redirect, Kirkconnell changed his testimony to accord with this interpretation.) It is evident that he was also asking about regulations governing exposure to the other contaminants listed in the memo; for instance, the memo stated "To the best of my knowledge there is no limit on  $\text{CS}_2$ ?" Further, there was the issue of standards which would apply to the treated water when it was discharged to some receiving environment.

<sup>8</sup> As will be discussed in detail below, this is a time-weighted average promulgated by OSHA which limits exposure of employees to  $\text{CCl}_4$  in air.

Kirkconnell prepared a lengthy "interim memo" on the groundwater treatment project dated September 15, 1978, addressed to Friedman. The memo stated "the choice of treatment and ultimate disposal schemes is highly dependent upon the interpretation of, both current and future, applicable Federal/State regulations and standards. Environmental Control and Legal are studying the applicable regulations and standards. The final decisions will probably develop from interpretations and rulings by the Alabama enforcement agency, AWIC." Concerning the  $\text{CCl}_4$ , the memo stated, "The use of a spray-pond for treatment of groundwater looks comparatively encouraging from both technical and economic considerations. In spray ponding the major contaminant, carbon tetrachloride, is flashed off into the atmosphere. The transfer of the liquid phase contaminant to become a potential gas phase contaminant, in the future, requires careful study." The memo repeated the information that the maximum predicted  $\text{CCl}_4$  level above the pond was 0.01 ppm and that the current 8-hour maximum exposure limit is 10 ppm. It stated "the air pollution limit on  $\text{CS}_2$  is unknown at this time." In discussing the major contaminants of the groundwater, the memo cautioned that the "typical analysis" of groundwater, based on "samples taken from several wells over a period of years" should not be confused with the analysis of well 029 from which the water was used for several studies. (This is the "worst case" well described in the earlier memo.) In discussing the study of a spray pond possibility, the memo stated that although the alternative offers certain advantages of cost, flexibility and the like, it "also has some unique disadvantages" due to the transfer of a pollutant to the air. The proposed location of the pond was described as being "at the apex of a rise, one-half way between the plant and the [Mobile River]." The other alternatives considered and discussed in the memorandum were removal of contaminants by activated carbon, by air stripping and by the use of a cooling tower.

Arthur Wood, plant manager at Le Moyne from 1973 to 1975, and director of manufacturing, Industrial Chemical Division during the period relevant to this case, testified that he has the overall responsibility for Le Moyne and 30 other Stauffer plants.<sup>9</sup> Gregory Heausler, technical superintendent of the Le Moyne plant during the relevant period, testified that from May 1978 he was the manager of the Le Moyne groundwater project;<sup>10</sup> Heausler was responsible for monitoring all the environmental activities at the plant, and, as groundwater project manager, his job was to coordinate efforts by the plant, by the geology department, and by the engineering department to solve the problem.

Both Wood and Heausler testified as to the origins of the Le Moyne groundwater treatment project. The

<sup>9</sup> Wood testified in a careful, quiet, and thoughtful manner. He displayed no animus toward Kirkconnell and gave exact, helpful answers on cross-examination. I find that he was a truthful witness and I shall credit his testimony.

<sup>10</sup> Heausler testified in a thoughtful, careful, and exact manner. He was helpful on cross-examination and did not seek to evade the questions. He freely expressed his liking for Kirkconnell and admiration for Kirkconnell's abilities. I find that he was a truthful witness and I shall credit his testimony.

Stauffer plant at Le Moyne is located next to a facility operated by Courtauld, a customer of Stauffer's. Courtauld and Stauffer monitor the quality of the groundwater under their plants by means of observation wells which pump the groundwater to the surface so that it can be analyzed. In the mid-1970's, a method for measuring low levels of  $\text{CCl}_4$  by gas chromatography was developed, and Stauffer was thus able to determine what level of  $\text{CCl}_4$  existed in the groundwater. From 1974 to 1976, monitoring of the wells showed a decrease in levels of  $\text{CCl}_4$ ,  $\text{CS}_2$  and iron in the groundwater under the Le Moyne plant as a result of the construction of an effluent treatment system by Stauffer. This system, which kept the plant effluent from coming into contact with the groundwater, was part of a program of compliance with an NPDES permit issued by the EPA. By mid-1977 and spring 1978, however, the level of  $\text{CCl}_4$  in Courtauld C-1 well showed an increase from 1 ppm to 30 ppm. Wood instituted a groundwater improvement program to develop solutions which could be presented to management for approval. Heausler, who had the major responsibility for determining the source of the groundwater contamination and its treatment, requested the assignment of Kirkconnell to perform the engineering work for the project. Both Wood and Heausler testified that Kirkconnell was familiar with the qualities of the groundwater at Le Moyne through his work on earlier projects at the plant. Kirkconnell's major task at the beginning of the project was to define the process by which the contaminants would be removed from the groundwater. The Le Moyne geology department was responsible for defining the underground conditions and devising a well system to pump the groundwater to the surface. Plant management had the responsibility for preventing further leaks which could contaminate the groundwater.

A "kick-off" meeting for the project was held in June 1978, at which Heausler and Stilson of the Le Moyne geology department gave Kirkconnell the background information he required. Then, in July 1978, a meeting was held at the Westport headquarters of Stauffer with Heausler, Wood, Dr. Robert Mickley, a Stauffer vice president, Ed Conant from the Environmental Department, and Friedman present.<sup>11</sup> Friedman made a presentation of the available technologies to remove  $\text{CCl}_4$  from the groundwater which was based on work done by Kirkconnell, and he mentioned steam stripping, carbon adsorption, air stripping, and stripping with the use of a pond. Due to the lower cost, it was thought aeration would be an attractive method, but Friedman and others were concerned that this would involve release of  $\text{CCl}_4$  to the atmosphere and thus present a hazard and a possible violation of Federal regulations. Wood himself preferred steam stripping; this technique had been used successfully by Stauffer to recover  $\text{CCl}_4$  and  $\text{CS}_2$  and it involved no release of chemical vapors to the atmosphere. Wood emphasized that aeration or spraying could be used only if it met both environmental and health and safety requirements. There was a discussion of current

employee exposure levels and future levels, and this area was determined to be one requiring further investigation.

Friedman<sup>12</sup> testified that, after the July 1978 meeting, he directed Kirkconnell to get a written report of regulations and standards applicable to  $\text{CS}_2$  and  $\text{CCl}_4$  from Williams, the then manager of industrial hygiene, and to ask Bruce Davis, a diffusion expert, to do a diffusion study of fallout at various distances from the treatment site. Williams died and thus did not produce the report. However, Davis submitted a handwritten report on October 6, 1978, which concluded that there would be "no problems." Kirkconnell testified on cross-examination that he never received the Davis memo. However, after it was shown to him, Kirkconnell acknowledged receiving it after asking Davis to run a math model. Kirkconnell testified that the memorandum dealt with atmospheric concentration of  $\text{CS}_2$  and  $\text{CCl}_4$  due to pond stripping of groundwater and that it concluded that there would be "no problems." Kirkconnell further testified that the memo stated that the concentrations Davis received by running figures through his math model were slightly lower than previous calculations and that the 8-hour limit for  $\text{CCl}_4$  is 10 ppm. Kirkconnell recalled being given the substance of the memo orally before receiving a written copy. On redirect, Kirkconnell stated that the "no problems" statement in the Davis memo applied only to distances greater than 500 meters from the spraying area.<sup>13</sup>

During the summer of 1978, Heausler testified, Kirkconnell informed him that he was investigating the cooling tower and carbon adsorption possibilities, and Heausler observed him performing aeration and spray tests at Le Moyne. Kirkconnell told Heausler that spraying was an advantageous method of removing  $\text{CCl}_4$  and  $\text{CS}_2$  and he demonstrated the technique. Heausler had previously not been familiar with the method.

Heausler had contracted with Groundwater Associates, a hydrological consulting firm, to conduct a study of the Le Moyne groundwater based on data collected from various observation wells. When the report was ready, Heausler arranged a meeting with upper levels of management to report on the status of the project and to get management approval for discussions with the Alabama Water Improvement Commission.<sup>14</sup> This meeting was held on October 10, 1978.

<sup>12</sup> Friedman had a poor memory for certain details, occasionally contradicted himself, and sometimes answered questions without giving the proper attention required for exact and accurate testimony. In addition, he admitted that he could not remember some of the events about which he was questioned. For these reasons, I find Friedman to be an unreliable witness and I am reluctant to give great weight to his testimony. However, it is necessary to evaluate his testimony on certain subjects in order to make the findings of fact necessary for a decision of this case. Therefore, I will consider Friedman's testimony in light of the other testimony and evidence in the case, and I will accept it where it accords with documentary evidence or other reliable testimony.

<sup>13</sup> Apparently due to the fact that the diffusional study related not to concentrations of  $\text{CCl}_4$  above the pond but instead dealt with wind-carried concentrations at various distances from the pond.

<sup>14</sup> Heausler testified that the consultants found that the groundwater contained an average concentration of  $\text{CCl}_4$  of 30 ppm based on data collected over several years including continuous pumping in 1978. The consultants predicted that after 6 months of treatment the concentration would drop to 15 ppm.

<sup>11</sup> None of the witnesses could recall why Kirkconnell was not present, although Friedman believed it was due to illness.

## 2. Events during fall and winter 1978

Kirkconnell testified that on October 6, 1978, a meeting was held at Stauffer Corporate headquarters in Westport, Connecticut, attended by Mickley, Stilson of the Le Moyne geology department, Heausler, Conant, a representative of the Stauffer legal department, and Kirkconnell's supervisor, Friedman. Kirkconnell testified that pursuant to Friedman's instructions, he spoke about four alternative ways to treat the groundwater at Le Moyne but offered no recommendations.<sup>15</sup> After he spoke, Mickley stood up and said he had decided that the water would be sprayed to discharge  $\text{CCl}_4$  into the air and that the water would then be discharged to the swamp on the plant property. (This so-called swamp is a creek which empties into the Mobile River.) Kirkconnell further testified that at the end of the luncheon which took place after the meeting, he told Mickley that the plant would be cited for a violation if it dumped waste into the swamp because the iron content would produce a red gelatinous waste. Kirkconnell also mentioned the toxic load to the air and said he did not know if it would be "within or without standards." This conversation lasted 5 or 6 minutes, although Mickley apparently said nothing throughout its duration. Kirkconnell stated that he did not know what the standards were at this time.

The memorandum dated October 6, 1978, prepared by Kirkconnell for the October 10 meeting, was introduced into evidence by Respondent. Its stated purpose was to present alternative schemes for treating polluted groundwater. The four alternatives discussed were (1) a spray pond which would remove  $\text{CCl}_4$  and  $\text{CS}_2$  to the air and store ferric hydroxide waste in a pond, while the treated water would be emptied to a receiving stream; (2) a system using activated carbon to remove and contain  $\text{CCl}_4$  and  $\text{CS}_2$  with a further process to remove iron; (3) steam stripping to remove and contain  $\text{CCl}_4$  and  $\text{CS}_2$  followed by treatment to remove iron; and (4) spraying to remove  $\text{CCl}_4$  and  $\text{CS}_2$  followed by iron removal. The processes requiring a separating iron removal step culminate in discharge of treated water to a receiving stream. The memorandum stated the advantages of activated carbon and steam stripping to be containment and recycling of  $\text{CCl}_4$  and  $\text{CS}_2$ , and the advantage of spraying without the pond to be low energy requirements. Concerning the concentration of  $\text{CCl}_4$  in the groundwater, the memorandum stated that typical groundwater contained 25 ppm of  $\text{CCl}_4$ , although well 029 produced test samples that varied from 110 ppm to 475 ppm. Spraying into the air, as suggested in two of the alternatives given, "will release the  $\text{CCl}_4$  and  $\text{CS}_2$  into the air. Calculations predict a maximum  $\text{CCl}_4$  instantaneous concentration in the spray area at 3 ppm.<sup>16</sup> The current 8 hour exposure limitation is 10 ppm." The memo also stated that quality limitations regulating contaminants that will be returned to a receiving stream are "unknown" and that all the alternatives are designed to reduce  $\text{CCl}_4$  in the effluent to 0.1 ppm.

<sup>15</sup> Indeed, Kirkconnell testified that he had no preference for a method of water treatment because he did not know the applicable regulations.

<sup>16</sup> The earlier concentration given as 0.01 ppm was erroneously calculated.

In his testimony, Kirkconnell did not explain why his memo gave the  $\text{CCl}_4$  exposure limit as 10 ppm although he claims not to have known this standard. When pressed to do so, Kirkconnell could not explain.

Heausler, who had the best recollection of any of the witnesses of the October 10, 1978, meeting, testified that Wood made some introductory comments at the meeting. Then Stilson gave the geology report. Kirkconnell gave a report reviewing alternative methods of treatment, briefly going over carbon adsorption and stream stripping, and concentrating on ponding, air stripping and spraying. Conant reviewed the legal requirements applicable to the project; the groundwater was not subject to Federal regulation since it did not affect drinking water and there were no Federal or state environmental air emission standards for  $\text{CCl}_4$  or  $\text{CS}_2$ , although there was an OSHA employee exposure limit of 10 ppm which might be lowered even further in the future. Heausler testified that there was much open discussion during the meeting, and that during this discussion, Mickley asked why the treated groundwater could not be discharged to the natural creek. Kirkconnell answered that the iron content would produce a red color. Then Heausler pointed out that Courtauld discharged to this creek without any problems. Wood's recollection of the October 10 meeting generally paralleled that of Heausler. However, he recalled that Kirkconnell had originated the idea of spraying the groundwater before aerating it in the pond.<sup>17</sup> Wood recalled saying that spraying would not be used unless it met all applicable regulations. He asked about  $\text{CCl}_4$  fumes over the proposed treatment pond, and Kirkconnell informed him that the level of  $\text{CCl}_4$  would not exceed 3 ppm. The result of the meeting, according to Wood, was that Mickley, the highest ranking member of management present, approved discussion of the groundwater problem with officials of the State of Alabama. However, Mickley did not announce a decision to discharge to the swamp. This was raised as a possibility. It was the sense of the meeting to proceed with aeration as the most promising method of removing  $\text{CCl}_4$  from the groundwater.

I find that the description of the October 10, 1978, meeting given by Wood and Heausler is accurate. I credit their testimony generally; moreover Kirkconnell's testimony is at variance with the memorandum which he himself had prepared and with other evidence. For example, the memorandum stated that the 8-hour exposure limit for  $\text{CCl}_4$  under OSHA is 10 ppm although Kirkconnell testified that at the time of the October 10 meeting he was unaware of any standards for  $\text{CCl}_4$ . Further, Kirkconnell at first denied receiving the memorandum written by Davis, but later changed his testimony to admit receipt. That document contains the OSHA standard for worker exposure to  $\text{CCl}_4$  in air. Thus, it is clear that from the earliest months of his assignment to the project, Kirkconnell was in possession of the standard for  $\text{CCl}_4$ . It is also clear from the testimony of Heausler and Wood that Kirkconnell promoted the consideration

<sup>17</sup> Wood had been aware of this before the meeting through his frequent contacts with Heausler and Kirkconnell at Le Moyne. Wood had approved Kirkconnell's plans to conduct the spray tests.



of a spray method of removing the  $\text{CCl}_4$  from the groundwater and that Kirkconnell enthusiastically developed tests to refine the spray method. I find also that Kirkconnell stated that the concentration of  $\text{CCl}_4$  above the pond would not exceed 3 ppm.

The meeting with AWIC was held in late October 1978; present were Wood, Heausler, Call, and Perry, the Le Moyne plant manager. According to Wood and Heausler, the consultant's report was given to AWIC officials and the history and proposed remedy of the groundwater contamination was set forth. Horn of AWIC explained that a major goal of AWIC was to obtain NPDES permitting authority from the Federal government and that certain difficulties were being encountered. Horn wanted to avoid getting Federal officials involved in the project, and he suggested avoiding any discharge of treated groundwater to a federally regulated waterway. Therefore, AWIC officials asked the Company to evaluate reinjection of the treated groundwater on Stauffer premises instead of discharge to the creek or swamp which emptied into the Mobile River.<sup>18</sup>

Following the October 10, 1978, meeting, Kirkconnell testified, he went to Le Moyne and conducted various engineering tests required for further design of the groundwater treatment project. Late in December 1978, or early in January 1979, he stated, the treatment plan changed substantially; it was now proposed to pump contaminated groundwater to the surface, treat it in a pond and return it to the ground by means of reinjection wells.<sup>19</sup> In January 1979, Kirkconnell testified, using analysis of water from six typical wells located in the area of most concentrated waste, he conducted a paper study of the average concentration of  $\text{CCl}_4$  at Le Moyne and found that instead of 30 ppm, the groundwater contained an average of 54 ppm. He also pumped 029 well at this time and, after 2 days of pumping, got a sample containing 475 ppm. Kirkconnell testified that he decided that this was a more accurate and representative sample "after conference with the geology department, the consultants with the geology department." He also decided that the other five wells should be pumped for 2 days to get a more accurate figure for all of them. Kirkconnell testified that, when he first obtained a figure of 475 ppm for  $\text{CCl}_4$  in well 029 in January 1979, he gave this figure to Stilson of the Le Moyne geology department. He and Stilson decided long-term pumping would be more accurate and Heausler also agreed that the wells should be pumped for a longer continuous period.

Kirkconnell maintained that at this time "I did not know the regulatory standards" for  $\text{CCl}_4$  in air; however, he knew that there would be a concentration of 50 ppm of  $\text{CCl}_4$  in the air. Kirkconnell testified that the original math model used to compute how much  $\text{CCl}_4$  would be released into the air was based on 30 ppm in

groundwater and showed a minimum of 2.5 ppm and a maximum of 31 ppm released to the air. Based on groundwater containing 45 ppm of  $\text{CCl}_4$ , the air load would be from 4.5 ppm to 56 ppm. He concluded that the level of  $\text{CCl}_4$  in the air "would be above any regulatory limit" and that he and other workers would be exposed to dangerous levels of  $\text{CCl}_4$ . Kirkconnell testified that he spoke to Friedman concerning his desire to pump the five other wells and concerning his fear of iron precipitation in the proposed reinjection or receiving wells, but that Friedman said nothing.

It is evident from all of his memoranda written before January 1979 that Kirkconnell did not, as he testified, obtain the 475 ppm concentration of  $\text{CCl}_4$  in January 1979. This figure was available to him and was used by him as early as August 1978. In his testimony concerning the "January" pumping and the 475 ppm reading, Kirkconnell stated that January 1979 was a "critical period" and that he kept elaborate notes. But on cross-examination, after having his attention directed to his own August 31, 1978, memorandum, Kirkconnell stated "my memory isn't as good as I thought it was," and he then recalled that he obtained a reading of 475 ppm in August 1978. I find that the testimony concerning the January pumping of well 029 is inaccurate and not credible and I shall not rely on it. I also do not credit Kirkconnell's testimony that Stilson and Heausler were concerned about the accuracy of the figures for average  $\text{CCl}_4$  content of the groundwater and wanted more continuous pumping as a result of Kirkconnell's "January" pumping of well 029. My findings as to Kirkconnell's assertion that workers would be exposed to 31 ppm or 50 ppm of  $\text{CCl}_4$  in air are discussed below.<sup>20</sup>

Raymond Holt, Stauffer director of methods and services, testified that he attended a meeting with Kirkconnell and Friedman in mid-January 1979 to review the status of the Le Moyne groundwater project including the October 6, 1978, memo.<sup>21</sup> Kirkconnell told Holt that reinjection was a preferred solution, but that he was also studying other methods. In February 1978, Holt again met with Kirkconnell and Friedman. They discussed the design parameters for the groundwater project, the spraying devices, the level of  $\text{CS}_2$  in the water, the problem of a ferric hydroxide floc and the problem of iron bacteria. According to Holt, Kirkconnell said he needed more tests, and mentioned the  $\text{CCl}_4$  in the groundwater. However, Holt stated that sufficient data were available

<sup>20</sup> Kirkconnell also testified on redirect examination that he pumped well 029 in 1979 and got a  $\text{CCl}_4$  concentration of 490 ppm and that this was more accurate. However, this figure is not given in any of his memoranda, and given Kirkconnell's demonstrated inability to remember without documentary aids when he pumped the wells and what concentration of  $\text{CCl}_4$  he found, I do not credit this assertion.

<sup>21</sup> Holt was named director of methods and services in November 1978. Before that he was chief engineer. The Le Moyne project did not come under his jurisdiction until January 1979. Holt was selected by counsel for Respondent to assist in the hearing while other witnesses were sequestered. I observed that he thought carefully before answering questions and that he was cooperative on cross-examination despite the General Counsel's efforts to confuse him. His recollection was not always exact as to dates and was occasionally refreshed by documentary evidence, but he gave no inconsistent testimony. On the whole, he made a sincere effort to recall and I credit his testimony and shall rely on it.

<sup>18</sup> In an aside to this testimony, Wood added that by July 1979, when technical problems with reinjection seemed insuperable, AWIC had informed Heausler that the Alabama State Legislature had appropriated sufficient funds to enable AWIC to get Federal permitting authority. As a result, surface disposal of the treated groundwater would be feasible under the anticipated AWIC permitting authority.

<sup>19</sup> This change in the proposed method of disposing of the treated water resulted from AWIC's preference for reinjection rather than surface discharge to a waterway.



from Kirkconnell's prior work and from samples taken from the wells that had been pumped continuously and some pumped biweekly. Holt told Kirkconnell to design on the basis of data he had available then. Kirkconnell told Holt that well 029 had a high concentration of  $\text{CCl}_4$  averaging at 80 ppm and that one sample showed over 400 ppm, and he suggested other wells might contain a lot of  $\text{CCl}_4$  also; however, Holt disagreed on the basis of the available data. Holt said that the one very high sample from 029 probably resulted from error or a contaminated bottle. Kirkconnell did not testify concerning these two meetings described by Holt, and Holt's testimony is uncontradicted.

### 3. Efforts to obtain regulatory standards

Because "I had given up on trying to get the regulatory standards and regulations through channels with the company," Kirkconnell stated, he called Paul Kaplan at NIOSH<sup>22</sup> in March 1979 to ask about the standards for "air exposure" and Kaplan informed him that the 8-hour exposure limit for  $\text{CCl}_4$  was 2 ppm.<sup>23</sup> Kaplan also told him that he would be held personally liable and could be prosecuted for a design that exceeded regulatory limits. As a result of this conversation and others, the specifics of which he could not recall, Kirkconnell decided that the design he was working on would "create an illegal toxic atmosphere that was dangerous to myself, other workers."

I find that Kirkconnell's testimony as to his conversation with Kaplan is unreliable. First, Kirkconnell clearly knew that the 8-hour exposure limit was 10 ppm; he had been regularly including this figure in his memoranda since August 1978. Second, Kirkconnell's memoranda written after the call to Kaplan in March 1979 make absolutely no mention of the supposed 2 ppm legal limit. Therefore, I shall not credit Kirkconnell's recollection of his conversation with Kaplan.

Kirkconnell testified that when he was unable to get the standards and regulations in response to his earlier memo requesting them, Friedman suggested he call Robert Leighton. Kirkconnell called Leighton in Houston and told him he needed standards and regulations with respect to toxic impact on employees. During the first conversation with Leighton, Kirkconnell did not get a satisfactory answer: "I do not remember exactly what he said but I did not get the numbers and data that I was looking for." In the spring of 1979, Kirkconnell sent Leighton a memo, with an identical copy to Sayers, requesting standards and regulations applicable to the Le Moyne groundwater project.<sup>24</sup> Receiving no response, Kirkconnell called Leighton, who said: "I don't know what you guys are trying to do." Kirkconnell testified that he made no response to Leighton when the latter gave him an evasive answer, and then terminated the conversation.

<sup>22</sup> National Institute for Occupational Safety and Health. This institute conducts studies and makes recommendations to OSHA concerning standards to be promulgated by OSHA.

<sup>23</sup> The evidence shows that a standard of 2 ppm was recommended to OSHA by NIOSH in 1975. It had not been adopted as of the date of the hearing herein, and the standard was still 10 ppm.

<sup>24</sup> This memorandum was not further identified.

Leighton, formerly employed by Respondent as a regional industrial hygienist, testified that he had spoken to Kirkconnell twice.<sup>25</sup> Their first conversation took place in late 1978 or early 1979; Leighton had received a document concerning the proposed groundwater treatment project at Le Moyne, and at his superiors' request, he discussed the work with Kirkconnell, asking the latter questions relating to the distance of the treatment facility from employees, the length of time employees would spend at the facility and the like. Kirkconnell told Leighton that the treatment facility would be physically removed from plant employees and that any worker who went over to monitor it would spend a maximum of 10 minutes per day performing monitoring duties. Leighton next spoke to Kirkconnell in April 1979, after he received a note from the latter requesting certain information. Kirkconnell called Leighton and again informed him that the Le Moyne treatment facility would be removed from the workers, that any employee monitoring the site would spend a maximum of 10 minutes per day there, and that the maximum concentration of  $\text{CCl}_4$  at the site would be 3 ppm. Kirkconnell asked Leighton about the Federal regulations, and Leighton told him that no worker would reach the 25 ppm ceiling for 15 minutes.<sup>26</sup> As the conversation continued, Leighton got the impression from Kirkconnell's questions that he was also asking about regulations that protect the environment, and Leighton attempted to explain that these are not applicable to worker exposure. Leighton tried several times to explain to Kirkconnell the difference between regulations that protect employees and those directed to conserving the environment generally, and he told Kirkconnell that he seemed to be asking about environmental regulations and that OSHA does not seek to protect the environment. However, Kirkconnell did not understand and kept asking his questions over and over in an irritated manner. After about 10 minutes, Leighton asked Kirkconnell what he was trying to do by twisting OSHA regulations to fit an environmental problem. Leighton stated that he told Kirkconnell to ask the EPA for any air standards he wanted, and that Kirkconnell implied that Leighton had the standard but was withholding it.

Leighton testified that it was his duty both to offer assistance to engineers working on projects and to review all the documents in a formal appropriations request before it was approved.<sup>27</sup> The assistance to engineers

<sup>25</sup> Leighton is the holder of a bachelor's degree in chemistry and a master's degree in health science. He testified pursuant to a subpoena served by Respondent. Leighton was a credible and reliable witness; his answers while testifying were careful and exact, and he made every effort to be responsive and helpful on cross-examination. I shall credit his recollection of events and conversations, instead of Kirkconnell's, wherever there is a conflict in the testimony.

<sup>26</sup> Leighton testified that OSHA regulations provide for a maximum exposure of employees to  $\text{CCl}_4$  for an 8-hour time-weighted average of 10 ppm (exposure may exceed the limit as long as sufficient time is below the limit); a 15-minute exposure ceiling of 25 ppm and a maximum peak for 5 minutes in any 4 hours of 200 ppm.

<sup>27</sup> An appropriation request (AR) is a formal document setting forth in great detail all the information available and all the plans prepared in connection with a proposed project. The AR is submitted to high level members of management for approval of funding.

was informal and did not amount to an approval of the project; the real review for purposes of safety and industrial hygiene came with the drawing up of the AR. Leighton testified that as Kirkconnell described the Le Moyne project to him, it seemed to present no safety problem. Further, he knew employees could wear respirators for 10 minutes per day if necessary. Leighton described the air-monitoring program in effect at Le Moyne and said he was familiar with the levels of vapors in the air at Le Moyne at the time of Kirkconnell's call. There had been a few cases of overexposure of workers at the loading docks and a CS<sub>2</sub> problem in the lab was corrected. Leighton testified that the ACGIH<sup>28</sup> recommends that notice of mixtures of vapors be taken, but that no government regulations exist to limit permissible mixtures. In response to a series of questions from the General Counsel, Leighton testified that the presence of chlorine, CCl<sub>4</sub>, and CS<sub>2</sub> vapors together does not produce a cumulative effect on the body, nor do these chemicals in combination have a potentiating effect; they all have different physiological effects on the body. Thus, the combined presence of these three vapors, each in permissible amounts, would not be harmful to the safety and health of employees.

In view of my finding that Leighton is a more reliable witness than Kirkconnell, and in view of Kirkconnell's inability to recall many of the events relevant to the instant case, I find that Leighton gave Kirkconnell the information he requested and that he did not conceal any applicable standards and regulations. Further, I find that Kirkconnell told Leighton that the proposed treatment facility would be removed from the workers, that employees would not spend more than 10 minutes per day at the site and that the maximum concentration of CCl<sub>4</sub> at the site would be 3 ppm.

#### 4. Discussions concerning the toxic load at the plant

Kirkconnell testified that in April 1979 he was assigned by Heausler to develop cost alternative treatment schemes to remove toxicants from the air in the laboratory and office area in the Le Moyne plant. Kirkconnell obtained data showing the vapors in the air from Larry Palmer, the director of the laboratory, and he again called Kaplan at NIOSH to ascertain how the legal limits for contaminants in air were calculated. According to Kirkconnell, Kaplan told him that "If you are at the limit with CCl<sub>4</sub>, that is given a 1; and if you are at the limit in SO<sub>2</sub>, that is given a 1 . . . you add them, and that is a 2. In other words, you are at twice the legal limit."<sup>29</sup> Kirkconnell testified that he decided that "the toxic load under average conditions in the plant was 4-1/2 times the maximum allowable limit."<sup>30</sup>

Kirkconnell testified that Heausler eventually told him that nothing would be done about the quality of the air in the laboratory, as the cost of correcting the situation was too high.

<sup>28</sup> American Conference of Government Industrial Hygienists.

<sup>29</sup> As will be seen from Leighton's testimony above, this method is erroneous.

<sup>30</sup> Apparently, Kirkconnell told no one in management of this startling conclusion. Nor did he file a complaint with OSHA.

Palmer testified that a new sulfur chloride addition to the plant caused problems when the seals on the pumps used to load the sulfur chloride became corroded. The area had to be hosed down and this led to the creation of fumes. There is no procedure to measure levels of sulfur chloride and the fume problem was detected by odor. These fumes were drawn into the lab area by the action of the lab hoods, which evacuate large amounts of air from the lab, causing replacement of the air from outside areas including the area near the sulfur chloride pumps. In the first quarter of 1979, Palmer investigated solutions to the fume problem and in doing so he spoke to Kirkconnell who had mentioned that he might know of a vendor to supply air scrubbers. Although he gave Kirkconnell a guess as to the data for the fumes, Palmer could not recall that Kirkconnell ever made any recommendations for solving the problem or ever presented estimates on the cost of solving the problem.

Palmer is responsible, with others, for industrial hygiene at the plant, and he developed the personnel monitoring program for hazardous gases with Leighton. He testified that the only area where values above the acceptable limits of toxicants have occurred is at the loading department. The sulfur chloride problem has been ameliorated but not solved. Palmer said that given his responsibilities in this area, he would remember if Kirkconnell had suggested a solution for the lab fume problem.

Concerning Kirkconnell's work on the groundwater treatment project, Palmer testified that his laboratory was responsible for providing the analysis of samples collected by Kirkconnell. Palmer could not recall any talks with Kirkconnell concerning the impact of the project on employees nor concerning the level of CCl<sub>4</sub> to be put into the air.

From Palmer's testimony, it is clear that he likes and admires Kirkconnell for the range of his knowledge. Palmer testified in a forthright manner, and I find him to be a credible witness. I shall therefore credit his testimony that he had no figures to show that unacceptable levels of toxicants were present in any area, except the loading docks. It follows that I do not credit Kirkconnell's testimony that Palmer gave him data to show that legal limits were being exceeded in the lab. Further, I credit Palmer's testimony that in his conversation with Kirkconnell he was expressing concern only about sulfur chloride and not about CCl<sub>4</sub>. Palmer's testimony shows that he was generally concerned with safety of the working environment and that in his effort to be "ambitious" and "to do a little bit above what . . . the guy before me did" he investigated certain areas including the question of the level of toxicants in the air. In view of his interest in this area, I find his testimony very reliable.

Around this time, Kirkconnell testified, he spoke to several "union level workers" at the plant. He remembered "in particular" being called into the office of one of these men, Dennis Beaver, who assertedly spoke "as a representative of the union." Beaver told him that he was aware that the groundwater project would increase the toxic load in the work area and he asked Kirkconnell about present levels of contamination. Beaver "was surprised that they were above the regulations and stand-

ards." Beaver then mentioned the possibility of working together to avoid increasing toxic levels at the plant. Also at about this time, Kirkconnell testified, Palmer asked him what the toxic loads resulting from the groundwater project would be and after hearing about these "in some detail," he said, "Kirk, what are you trying to do, kill us?" Finally, also in April and May 1979, Kirkconnell testified that he discussed the problem of the toxic load at the Le Moyne plant with several engineers and chemists, but he could not recall the names of any of these employees.

Dennis Beaver testified that he is no longer employed by Respondent. He remembered talking to Kirkconnell in the lunchroom at Le Moyne, but stated that they never discussed pollution abatement at the plant. After Beaver's testimony, Kirkconnell testified that he was wrong in saying he had spoken to an employee named Beaver, and that he thought he had spoken to D. O. Smith, although he could not be sure about this. I do not credit Kirkconnell's testimony that he spoke to D. O. Smith or any other employees about the toxic load at the plant in view of Kirkconnell's demonstrated inability to remember any of these events clearly, accurately, or specifically.

#### 5. Events of spring 1979

Heausler and Holt testified about a meeting held with Kirkconnell and Stilson at Dobbs Ferry, New York, in April 1979.

Holt testified that he called a meeting for April 4, 1979, to review a rough draft of a preliminary appropriation request written by Kirkconnell and in order to make sure all participants were aware of their responsibilities. In addition to Holt and Kirkconnell, Heausler, Stilson, and Friedman were there. At the meeting, Stilson completely reviewed the hydrological consultant's report. Kirkconnell said the work required to produce a final AR would take 3 months and \$100,000 for study and testing. Kirkconnell also stated that he could not start designing until he confirmed the level of CC1<sub>4</sub> in the groundwater. Holt told him to make the best estimate with available data and proceed on that basis. Stilson expressed the thought that a realistic average CC1<sub>4</sub> content was 35 ppm. In discussing the risks of the project, Kirkconnell said that NIOSH permitted 10 ppm of CC1<sub>4</sub> at ground level and that this would in the future be lowered to 2 ppm. However, the anticipated level of CC1<sub>4</sub> at the proposed pond would be 3 ppm.

Heausler volunteered to rewrite the preliminary AR, and a schedule for completing further necessary work on the groundwater project was drawn on a blackboard with the participation and agreement of all the men present. Instead of 3 months to achieve a final AR, 6 months were allowed—until September 1979. This would permit the Le Moyne geology department to drill more test wells to check the feasibility of reinjection wells in view of possible iron content problems, permit Kirkconnell to test spray devices and concentrations of CC1<sub>4</sub> in both air and water after spraying, and would provide more time to write the various sections of the AR including the alternative treatments, fall back positions and costs. Kirkconnell again asked to pump well 029 and

Holt refused on the ground that there were sufficient data.

Holt testified that by this time he had made no final decision as to the method of treatment to be chosen. He relied on reports from Kirkconnell to guide him, and although the project was directed to using a spraying or stripping step followed by reinjection, the preliminary AR was to be written so as to preserve the option of discharge to the river instead of to reinjection wells. The final decision as to the method of disposal for the treated water would only be made when the final AR was written.

According to Heausler, the status meeting took place on April 2, 1979, at Dobbs Ferry. Heausler recalled that Kirkconnell spoke about iron precipitation problems in the proposed reinjection wells, and he wanted to do more testing to determine volumes of sludge formation and bacteria formation. Holt maintained that enough testing had been done to determine if reinjection was practical. According to Heausler, Holt voiced a concern about meeting deadlines for the project. Heausler stated that he particularly remembered the level of disagreement between Holt and Kirkconnell over the need for further testing of the feasibility of reinjection; in the event, the schedule that was developed provided for future testing as related above.

Although Kirkconnell did not recall this meeting on his direct testimony, he testified on the General Counsel's rebuttal case that he attended a meeting in late April or early May or on April 11, 1979, and reported that he had more accurate data on CC1<sub>4</sub> and that there was a problem with the concentrations at the spray site. Kirkconnell wanted to pump "the key wells," but Holt said he wanted no more work on the observation test wells. Kirkconnell testified that this was a planning meeting and that a chart was established for the work effort. It was decided to test the groundwater for compatibility with proposed reinjection wells. Kirkconnell suggested a pilot study (a sort of miniature treatment spray pond) and suggested it would test the actual concentration of CC1<sub>4</sub> in air, but Holt rejected this as too costly. Kirkconnell explained that he wanted to do the pilot study because the math model for CC1<sub>4</sub> in air was inaccurate.

Concerning the idea of pumping the six observation wells continuously, Heausler testified that continuous pumping had been done in 1977 after one well had shown a 30 ppm concentration of CC1<sub>4</sub>. The effect of the continuous pumping was to reduce the concentration to 1 ppm. In early 1978, Stilson suggested continuous pumping to Heausler.<sup>31</sup> The continuous pumping of six wells including 029 was undertaken and was completed in September or October 1978. Heausler thought the wells should be pumped continuously throughout the project in order to obtain the most representative samples of groundwater and to compare the new data with the 1978 data which had formed the basis for the consultant's report.

Based on the testimony of Holt and Heausler, whom I have found to be more reliable witnesses than Kirkcon-

<sup>31</sup> Heausler was sure this was not Kirkconnell's idea.

nell, I find that this planning meeting took place in early April 1979. I find that Kirkconnell wished to pump the wells to obtain more data on the groundwater with respect to levels of  $\text{CCl}_4$  and the feasibility of reinjection wells, but that Holt decided that there were sufficient data to form the basis for a design. I also find that it was decided that more tests would be conducted, including a test by Kirkconnell of spray devices and concentrations of  $\text{CCl}_4$  resulting in air above the spray site as well as levels of  $\text{CCl}_4$  remaining in the treated water after spraying. Thus, I do not credit Kirkconnell's testimony that his idea for spray testing was rejected as too costly. I find that at this meeting there was discussion to the effect that fall back positions were available to be used in case the spraying reinjection method was not approved by Stauffer management. I credit Heausler's testimony that the significant disagreement at this meeting between Holt and Kirkconnell arose over the question of further tests to determine the feasibility of using injection wells as a method of disposing of the treated groundwater. I also find that a major purpose of this meeting was to establish schedules and deadlines for future work.

Kirkconnell testified that on May 8, 1979, he wrote a memorandum concerning the groundwater project to Stilson. The memo stated that "solving this problem must comply with the regulatory agencies." In response to a question from the General Counsel, Kirkconnell stated that he inserted that sentence into the memo because he was concerned that the selection of a technique to remove toxicants from the water was "contingent upon the regulatory agencies" and the method that was going to be used was "clearly outside the regulations." The General Counsel's next question was whether Kirkconnell had yet received the relevant regulatory standards from Stauffer, and Kirkconnell answered "No." A fair reading of this two page memorandum which was introduced into evidence by the General Counsel shows that it is a review of an April 19, 1979, telephone conversation between Stilson and Kirkconnell concerning Kirkconnell's belief that grave technical problems relating to the iron content of the water would arise when the treated water was attempted to be reinjected into receiving wells. The memo clearly was written in support of Kirkconnell's conclusion that the iron content of the water would plug the reinjection wells, and it concluded: "It would seem reasonable that we re-evaluate the injection well concept." The mention of "regulatory agencies" in the first substantive paragraph of the memo is a repetition of the aim of the groundwater project restated many times over in previous memoranda—to remove contaminants from the groundwater while complying with all applicable government regulations. There is no basis for believing it related to  $\text{CCl}_4$  alone; the statement related to all sorts of regulatory problems.

During cross-examination of Kirkconnell by counsel for Respondent, a memorandum written by Kirkconnell to Heausler dated May 7, 1979, was introduced into evidence. This document, an 8-page discussion with appendixes, was an interim report on studies performed by Kirkconnell relating to control of iron to prevent plugging of proposed reinjection wells; it also reported recent lab studies of techniques for stripping  $\text{CCl}_4$  from the

groundwater. The memo presented detailed facts and figures to support the conclusion that the iron content of the groundwater would promote formation of gelatinous and bacterial plugging of the receiving wells. The memo showed test results of analysis of wells selected by the geology department as being representative of the groundwater. The average  $\text{CCl}_4$  content was now shown to be 54 ppm; included in this average is 029 well, shown to have 160 ppm of  $\text{CCl}_4$ . The memo described studies performed by Kirkconnell to determine the amount of  $\text{CCl}_4$  that could be removed from the treated groundwater with various spray and nozzle techniques and to determine under what conditions the  $\text{CCl}_4$  content could be decreased to 1 ppm and below. A cost comparison was given for three alternative methods: activated carbon, spray pond, and steam stripping (all with iron removal). This memorandum did not mention the concentration of  $\text{CCl}_4$  in air at the plant location. When counsel for Respondent attempted to inquire whether the earlier figure for  $\text{CCl}_4$  of 475 ppm had been abandoned by Kirkconnell or whether it was included in the May 7 report, Kirkconnell answered evasively several times. Finally, he stated that the concentration of  $\text{CCl}_4$  in the 029 well was included in the 54 ppm figure he used as the average  $\text{CCl}_4$  concentration of the groundwater, but that the 475 ppm figure was not used. I conclude from a review of this part of the testimony that Kirkconnell had indeed accepted that the 475 ppm concentration was not required to be included in any discussion of average groundwater at Le Moyne. This memorandum is the first mention in writing by Kirkconnell of an average  $\text{CCl}_4$  content of groundwater above 30 ppm. It is clear that Kirkconnell believed at this time that the average concentration of  $\text{CCl}_4$  in the groundwater was 54 ppm; there is no basis for a finding that he believed the average was any higher.

On rebuttal, Kirkconnell testified that after this memorandum was sent to Heausler, he saw the latter at Le Moyne and told him that with an average  $\text{CCl}_4$  groundwater concentration of 54 ppm, the math model showed that the concentration of  $\text{CCl}_4$  in the air above the treatment site would be 4.5 ppm to 56 ppm and that if the wells were pumped longer, one could get even higher figures.<sup>32</sup> Heausler said he would arrange for the tests and around May 25 or 27, Kirkconnell received a memo from Heausler saying the wells were in good enough repair to be pumped. Heausler testified that Kirkconnell never expressed any fears about  $\text{CCl}_4$  and the safety of the project to him.

Concerning Kirkconnell's assertion that the math model resulted in a range of possible concentrations of  $\text{CCl}_4$  above the proposed treatment pond, Holt testified that such calculations do not produce ranges. The math model provides a fixed result, but this result may vary as the input is varied. Wood also testified that the math model for computing concentrations of  $\text{CCl}_4$  in air would give a range of concentrations only if a range of differing inputs were used in the computation. Thus, both men testified, in essence, that Kirkconnell's asser-

<sup>32</sup> Past pumping of the wells had actually reduced the level of  $\text{CCl}_4$  in groundwater according to the evidence in this case.

tion could not be correct. Since Kirkconnell was feeding into the math model a single number representing the  $\text{CCl}_4$  in the groundwater, he would obtain a single result showing the concentration of  $\text{CCl}_4$  in air above the water, not a range of results. Based on the testimony of Heausler, Holt, and Wood described above, their testimony that Kirkconnell never gave them "ranges" of concentrations of  $\text{CCl}_4$  in the air above the spray site, and on the complete absence of any mention of a concentration of  $\text{CCl}_4$  in air at any value above 3 ppm at the treatment site, I do not credit Kirkconnell's assertion that he expressed his belief that  $\text{CCl}_4$  concentrations in air might be higher than 3 ppm. Nor do I credit his assertion that "ranges" of concentration were ever mentioned by him.

In June or July 1979, Kirkconnell testified, he encountered Wood in the Atlanta airport. He told Wood that there were two "serious problems" relating to the Le Moyne groundwater project: disposal of the treated water by reinjection was not feasible due to anticipated plugging of the receiving wells, and the concentration of  $\text{CCl}_4$  above the spray pond would be far higher than originally estimated. Wood could not recall the conversation which took place when he met Kirkconnell in the Atlanta airport, but he testified that Kirkconnell never expressed the latter fears. I credit Wood's testimony.

#### 6. Events of summer 1979

Sometime in the summer of 1979, Kirkconnell testified, Holt asked him to prepare a report stating that the polluted water could be pumped out of the ground in 2 years. Kirkconnell refused because in his view this would be an inaccurate statement. Holt did not testify concerning this event.

Holt testified that a meeting was held on July 11 or 12 with Kirkconnell and Friedman in order to prepare for an August meeting requested by Wood to review the status of the groundwater project. At this meeting, Holt asked Kirkconnell what progress he had made on a cost estimate, particularly with respect to the fall back position of steam stripping, and what progress he had made with the design of the pond. Holt informed the men that AWIC could issue effluent permits by September or October 1979. (Wood had previously told him the plant was leaning to discharge of the treated groundwater to the river.) Kirkconnell reported that he did not have the costs or the final pond design. He wanted further testing of spray devices but did not have a protocol of the remaining test work. Kirkconnell said he would consider the effects of weathering and aeration on  $\text{CCl}_4$  removal but that this design was not completed. Holt told Kirkconnell to prepare at least a status report for the August meeting. Holt stated that he had looked at curves attached by Kirkconnell to his reports, and he expressed the opinion that he was unsure the concentration of  $\text{CCl}_4$  in treated water could be reduced from 1 ppm to 50 ppm.<sup>33</sup> Kirkconnell stated that with weathering and aeration, this goal could be achieved. Kirkconnell reported that the data for steam stripping were to be obtained from a vendor. Holt testified that Kirkconnell did not re-

quest more tests of the  $\text{CCl}_4$  content of groundwater.<sup>34</sup> Friedman testified that Kirkconnell wanted to conduct further spraying tests and that it was agreed that there would be more testing; however, Friedman told Kirkconnell that his report must be prepared before he could go back to Le Moyne for further tests. Friedman stated that the major topic discussed was reinjection and that Holt asked many questions about the iron plugging problem. Kirkconnell told Holt that Holt didn't understand the problem and "you don't have the right to ask me questions." After this meeting, according to Friedman, he told Kirkconnell that the latter should not talk to Holt that way.

Kirkconnell testified that in July 1979 he spoke to Friedman and Holt in the latter's office in what he characterized as a "key" meeting. In the course of presenting a status report on the Le Moyne project, he stated that the amount of  $\text{CCl}_4$  was higher than previously estimated and that employees at the plant would be exposed to toxic materials at levels exceeding legal limits under the proposed project design. Kirkconnell also told Holt that precipitation of iron compounds would plug the reinjection wells. Kirkconnell requested permission to pump the five other wells for 2 days to determine the amount of  $\text{CCl}_4$  in the groundwater. The request was denied. During this meeting, Kirkconnell testified, Holt said that he "didn't care" how much  $\text{CCl}_4$  was in the water, "it has to come out," and Holt repeatedly asked him why he was working on a project if he did not believe it would succeed. After the meeting, Friedman told Kirkconnell he had a good job and asked, "Why don't you do what he says?" Kirkconnell replied that he would not design a system that was not technically feasible and that was "outside legal limits." Friedman then remarked you "can't talk to Holt that way."

Although Kirkconnell did not testify about them on his direct examination, Respondent introduced two memoranda written by him in July 1979. A two-page memorandum dated July 17, 1979, addressed to Friedman, with copies to J. Cooper, manager of the industrial hygiene department, Heausler, Holt, and Stilson, was entitled "groundwater interim report."<sup>35</sup> The first paragraph, entitled "problem statement" read: "The object of this effort is to prevent groundwater, with certain contaminants, from flowing to Courtauld wells; all water control and treatment techniques to be in compliance with standards and regulations established, or negotiated, with AWIC." The memo names four alternative treatment schemes as being "concept design and in drafting as block diagrams": Reinjection, with or without removal of total suspended solids (mostly iron), and surface disposal, with or without removal of total suspended solids. Removal of  $\text{CCl}_4$  is stated to be possible to below 50 ppm with air stripping. Concerning OSHA standards, the memorandum states:

<sup>34</sup> Holt's affidavit given in June 1980 states that Kirkconnell did request such testing. Holt stated that his affidavit was wrong.

<sup>35</sup> Kirkconnell testified on the General Counsel's rebuttal that he wrote this memorandum after the July meeting with Holt and Friedman.

<sup>33</sup> Parts per billion.

An estimate has been made as to the anticipated concentration of  $\text{CCl}_4$  at the site where the stripping will take place. The math model for this estimate is admitted by all concerned to be highly inaccurate, but is the best available technique. The anticipated levels of concentration were verbally submitted to J. Cooper. The probability of being required to retrofit for  $\text{CCl}_4$  recovery was discussed. J. Cooper will provide his written comments and suggestions to S. Friedman.<sup>36</sup>

The concluding "comments" of the memo deal with the "high" and "costly" risk of iron plugging of the receiving wells in the proposed reinjection technique. A list of "future work" is given:

1. G. Heausler will negotiate with AWIC for most favorable effluent standards to cover disposal of the treated groundwater to the river . . . based upon the best practical treatment methods.
2. A risk analysis will be made by EE [Eastern Engineering] for the four alternative treatment schemes.
3. An optimized stripping technique will be developed by EE which will include an estimate of the  $\text{CCl}_4$  concentration at the site.
4. The four alternative schemes will be illustrated on a blow flow sheet.
5. The four alternative schemes will be costed by our cost group.
6. A report will be issued by EE about August 1. EE will carry the project through PFD's [process flow design].
7. EE will secure a project engineer to take the project beyond PFD's. . . .

When Kirkconnell testified on the General Counsel's rebuttal concerning this memorandum, he stated that he referred to a standard math model used by Government and industry to determine vapor concentrations at the spray site. (There is a different math model used for concentrations carried by wind to locations away from the site.) Kirkconnell testified that Bruce Davis ran the math model and that he accepted Davis' answers and conclusions. Kirkconnell asserted that Davis was the source of the information in the summer of 1978 and that the concentration at the site would be a range from 2.5 ppm to 31 ppm. Kirkconnell's testimony at this point is confused. He had testified that the Bruce Davis math model related only to concentrations of  $\text{CCl}_4$  as they were diffused at certain distances from the site and not concentrations directly above the spray site.

Careful reading of the memorandum, as well as all the other memoranda introduced into evidence, convinces me that Kirkconnell had reference to a math model for diffusion of  $\text{CCl}_4$  at various points from an air stripping

location including a cooling tower when he spoke of a "highly inaccurate" math model. The concentrations of  $\text{CCl}_4$  at various points at the plant resulting from stripping had not been stated by Kirkconnell in his previous memoranda. However, the concentration of  $\text{CCl}_4$  directly above a spray site had been stated by him to be a maximum of 3 ppm and no inaccuracy had been asserted in Kirkconnell's memoranda as to this figure.

Referring back to the October 10, 1978, meeting, Kirkconnell stated that he did not inform those present at the meeting that the concentration of  $\text{CCl}_4$  would be as high as 31 ppm; however, he testified that he told Mickley "that the Carbon Tet levels would be in excess of standards—there was a risk here."<sup>37</sup> Counsel for the Charging Party immediately called to Kirkconnell's attention the fact that he may not have known the standards in October 1978 (indeed, Kirkconnell had been maintaining during the hearing that he was ignorant of them), and Kirkconnell then changed his testimony to say: "I did not know the complete standards and regulations relative to carbon Tetrachloride at that time." I believe that this exchange is significant and illuminating. I believe this testimony bears out what is suggested by all of Kirkconnell's memoranda, beginning with the very earliest one dated August 24, 1978; that is, that he was well aware that the standard 8 hour time-weighted permissible exposure was 10 ppm. It is possible he did not know "the complete standards"; however, Kirkconnell did not make this distinction in his earlier testimony. Indeed, he strove valiantly by his testimony to give the impression that he did not know any of the standards for exposure to  $\text{CCl}_4$  in air, that no one in the Company ever replied to his requests for such information, and that he only received the information in March 1979, when he telephoned Kaplan of NIOSH.<sup>38</sup> I thus conclude that in this area the witness was not candid and reliable. I have therefore relied on his written memoranda rather than his memory to make the necessary findings of fact.

I credit the testimony of Holt and Friedman, which is fully supported by Kirkconnell's own memorandum of July 17, 1979, as to the substance of the meeting of July 11 or 12, 1979. Thus, I find that Kirkconnell was asked about his progress on the Le Moyne design and that Holt inquired about the feasibility of treating the groundwater so as to reduce the  $\text{CCl}_4$  content to 50 ppb. I also find that Holt and Kirkconnell discussed the problems expected if the treated water were to be disposed of by means of reinjection wells, and Kirkconnell emphasized his belief that these wells would quickly become plugged as a result of the iron content of the groundwater. I find that Kirkconnell stated his intention to conduct further tests of the various spray devices and designs he was considering in order to determine the best design and in-

<sup>36</sup> Retrofitting for recovery of  $\text{CCl}_4$  refers to the possibility that if on site concentrations of  $\text{CCl}_4$  exceeded permissible limits, a method of recovering  $\text{CCl}_4$  rather than discharging it to the air would have to be implemented. It will be remembered that Wood had favored this technique from the beginning. Several witnesses testified that Stauffer's policy when planning new facilities was always to consider and provide an alternative method if the one implemented should prove insufficient when in actual operation.

<sup>37</sup> The transcript at p. 3605, l. 22 reads, "in excessive standards." The transcript is incorrect and it is hereby corrected to read as given above. I note that when Kirkconnell testified on direct he stated that he told Mickley that he did not know if the toxic load to the air would be within or without the legal standard.

<sup>38</sup> Until he was confronted with the October 1978 Bruce Davis memo and the July 31, 1979, memo written by Cooper, with copy to Kirkconnell, he repeatedly maintained that no one in the Company ever gave him applicable standards for exposure to  $\text{CCl}_4$ .

corporate this into the final AR. I do not credit Kirkconnell's assertion that he told Holt and Friedman that employees would be exposed to unlawful concentrations of CCl<sub>4</sub> in the air at the treatment facility; and I find that he did not request pumping of the wells. I find that the disagreement between Holt and Kirkconnell at this meeting was over the feasibility of reinjection; Kirkconnell was still attempting to show Holt that reinjection was not a good method of discharging the treated water. The memorandum of July 17, which Kirkconnell admitted writing after the meeting, referred to only one aspect of the project as having a "high" risk, and that was the not yet fully abandoned plan to direct the treated water to reinjection wells. The discussion of expected levels of CCl<sub>4</sub> at the proposed treatment site did not indicate that Kirkconnell was troubled concerning that subject. Finally, I find that Kirkconnell resisted Holt's attempts to question him as to various aspects of the groundwater project.

On July 19, 1979, Kirkconnell addressed a one-page memorandum to Friedman "to confirm our conversation of this date, and to bring up-to-date my project status report of 7/17/79." The first two items of this memo read as follows:

*R. Kirkconnell Report Date*

The report is planned for issue about August 1, 1979.

*Mid-August Meeting*

The proposed date was estimated and flexible. It was assumed that the specific date would be adjusted to accommodate the progress of the related work.

Two more items follow which discuss, in substance, Kirkconnell's plan to review block flow sheets with Ed Stocker on July 20, 1979, and additional details required to cost the project.

Heausler testified that he saw Kirkconnell at Le Moyne at various times between April and July 1979. In May or June, Kirkconnell told him that he feared Holt would fire him. Heausler responded that he did not believe it would happen because Holt's major interest was in the schedule and if Kirkconnell met his deadlines there would be no problem. However, Kirkconnell said it had gone too far and that he was now concerned about protecting himself. On cross-examination, Heausler testified that Kirkconnell did not mention CCl<sub>4</sub> as being involved in his inability to meet deadlines. Heausler stated that he would have remembered such an assertion if it had been made to him because at that time there was no question in his mind about the ability to remove CCl<sub>4</sub> from the groundwater. Heausler added that he saw Kirkconnell many times at Le Moyne and that they often spoke about removal of CCl<sub>4</sub> from the groundwater, but that Kirkconnell had not expressed any concerns about the process to him. According to Kirkconnell, in June 1979 he talked to Heausler about personal matters including the subject of a promotion to the Baton Rouge plant for Heausler. They also discussed Holt, and Kirkconnell asked Heausler's advice concerning his disagreement

with Holt over repumping of the wells. Heausler told him to "keep your nose clean." Heausler was emphatic in his testimony that he never discussed a Baton Rouge promotion with Kirkconnell; he was sure that an assignment to that city was not in his career plans. I credit Heausler's version of this conversation.

Holt testified that in the latter part of July, Friedman informed him that he was having difficulties with Kirkconnell, who was, according to Friedman, not getting his job done and not following instructions. Holt told Friedman to prepare goals for Kirkconnell, review them with the latter and later conduct another appraisal of Kirkconnell's work based on his performance of the goals. He suggested that Kirkconnell might wish to add to the goals himself. Sometime on August 6, before the meeting with Wood, Friedman showed Holt the list of goals.

Friedman testified that on or about August 2, he spoke to Mr. Raymond Zittel, a personnel supervisor, and asked him to counsel Kirkconnell about antagonizing Holt. He also mentioned to Zittel that he was preparing a list of goals for Kirkconnell.<sup>39</sup>

On August 2, 1979, Kirkconnell testified, Zittel informed him by telephone that Friedman had told Zittel that Kirkconnell "was going to be set up and fired." Kirkconnell testified that he lunched with Zittel a few times per week and took walks with him. He denied that Zittel ever told him that he had to meet certain work and performance standards.

Zittel testified that he spoke to Kirkconnell in September 1976 concerning a performance appraisal with which Kirkconnell did not agree. Zittel counseled him that in the section of the appraisal reserved for employee comments, Kirkconnell should write that he did not agree and would try to conform to Friedman's wishes. At that time, Kirkconnell told Zittel that if things went badly "he would have to seek legal recourse."<sup>40</sup> In July 1979, Friedman asked Zittel to speak to Kirkconnell to try to "get Mr. Kirkconnell to be more cooperative with Mr. Friedman." Zittel spoke to Kirkconnell about mid-July and told the latter to try to get along better with his supervisor. According to Zittel, he had spoken to Kirkconnell for a similar purpose "on numerous occasions." On this occasion, Kirkconnell said "he was trying to make an effort and that he thought he was making some headway in making an effort," but that he was concerned about a report that was due in a short time and for which he did not have all the information. Kirkconnell told Zittel that he felt he was "in some sort of a setup situation" because of the short deadline. Kirkconnell did not "want to put in a report that was wrong." Zittel advised Kirkconnell to prepare the report, indicating where necessary that he did not have all the required information.

Sometime during the first week in August, Zittel testified, Friedman came into his office seeming agitated and said: "I have had it with Mr. Kirkconnell. I don't want

<sup>39</sup> Written goals are used by Stauffer management as a counseling tool to help employees improve their job performance. Kirkconnell was familiar with this method through prior incidents at Stauffer.

<sup>40</sup> Zittel impressed me as a witness who attempted to give careful and exact answers, and I shall credit his testimony.



Mr. Kirkconnell working for me any more." Friedman mentioned that he was preparing a list of goals for Kirkconnell. After this, Zittel called Kirkconnell in an effort to save his job and informed him that he was "set up to be terminated." Kirkconnell said he understood. A few days later, Friedman called Zittel from California, again in an agitated state. He told Zittel that he had just spoken to Kirkconnell on the telephone and that Kirkconnell said he was going to take legal action against Friedman or Stauffer and would contact the Westport office about this. Zittel suggested that Friedman inform Holt. During this conversation, Zittel testified, Friedman did not tell Zittel that Kirkconnell would be discharged.<sup>41</sup>

I credit Zittel's version of his counseling sessions with Kirkconnell, including his efforts to counsel Kirkconnell in July 1979. Indeed, Zittel's testimony that he often spoke to Kirkconnell about relations with supervisors and about meeting deadlines is supported by certain annual performance evaluations introduced into evidence by the General Counsel. These show that in 1976, Kirkconnell was counseled concerning "communicating, relating to others, stability under pressure [and] organizing and scheduling." In 1978, Kirkconnell was told that he needed improvement in estimating his work load so as to meet agreed target dates. In May 1979, Kirkconnell was told that he still needed to work on meeting agreed-upon target dates and that he must "continue to improve his work relationships, particularly by controlling his temper."

On July 31, 1979, Kirkconnell testified, Friedman held a meeting with the chemical engineers and told them that in the future no technical information concerning sensitive material in the environmental area should be included in their regular reports because "it could be detrimental to the company." Kirkconnell testified that "this was a change from normal procedure within the company." In response to a question from the General Counsel as to "what was the normal procedure at that time," Kirkconnell stated: "Normal procedure was to put your factual information into a report in order to conduct business. There was the confidential memo available." During this meeting, according to Kirkconnell, he asked Friedman who was responsible for the design of a unit outside the law, and Friedman responded that it was not his concern.

Friedman recalled the July 1979 meeting of his department as one where he told the engineers not to make reports on insufficient information and to remove incomplete and misleading information from the files.

Kirkconnell testified that after the "key meeting" of mid-July, he spoke to his attorney, Gregor F. Gregorich, sometime in late July. He told Gregorich that the system he was working on was outside the law and a danger to life, but that he would be fired if he did not design the system. Gregorich testified that he spoke to Kirkconnell in late July or early August 1979, and that the latter told Gregorich that a meeting had been called to discharge him but also to discuss his work. Gregorich told Kirk-

connell that nothing could be done until the employer took some action. According to Gregorich, Kirkconnell told him that he was being asked to execute steps concerning water and air treatment that he thought were unprofessional and hazardous to employees in the plant. Kirkconnell was concerned that he was to be terminated because he refused to carry out these orders. Although I credit Gregorich's testimony, I do not find it persuasive in finding the facts herein. First, it is clear from Gregorich's version of the conversation that Kirkconnell knew he was about to be terminated; thus, Kirkconnell was already trying to take steps to prepare for litigation. Second, and most important, the fact that Kirkconnell may have made certain statements to his lawyer does not make them any more true than when they were made by him on the witness stand.

#### 7. The meeting of August 6, 1979

On August 2, 1979, Kirkconnell testified, he received two short memoranda from Friedman. One stated that Wood, Kirkconnell, Holt, and Friedman would meet in Dobbs Ferry on August 6 at 1 p.m. "to review Bob Kirkconnell's report and recommendation." The agenda was stated to be:

Presentation of Bob's report and recommendations.  
Review of target date and environment restraints.  
Need for a project engineer. . . .  
Who's to prepare A/R? Timing and schedule.

The second memo from Friedman to Holt informed the latter that Kirkconnell would have a rough draft of his report for review in Holt's office at 2 p.m., August 6.

Kirkconnell testified that before August 2, 1979, he did not know that he was expected to submit a report on August 6. Indeed, on cross-examination he stated that even after he saw the two memos described above, he did not think he was supposed to prepare a report for August 6. The only report that Kirkconnell knew of was a cost-study that was to be issued by Mr. Ed Stocker, the head of the costing group. When confronted with a copy of his July 19, 1979, memorandum to Friedman which states, "The report is planned for issue about August 1, 1979," Kirkconnell testified that that referred to the Stocker cost-study. Manifestly, that testimony cannot be correct since in his memo Kirkconnell entitled the topic "R. Kirkconnell Report Date." Further in the memorandum of August 14, 1979, Kirkconnell refers to "my report," stating that "report issuance is awaiting approval of the Operating Committee on the included cost study." Thus, it is evident that the cost study to be done by Stocker was to be added to a report which Kirkconnell himself was to prepare.

After extensive cross-examination by counsel for Respondent, Kirkconnell admitted that he had agreed with Friedman that he would issue a report by August 1, and that items numbered 2, 4, and 5 listed as future work in his memorandum of July 17 were to be in the report, albeit in a scope and format that was altered as time went on. Finally, on redirect examination by the General Counsel, Kirkconnell conceded that the "report" re-

<sup>41</sup> As will be seen below, this conversation took place on August 9 or 10, 1979.

ferred to in his memo of July 19 and in Friedman's memos of August 2 did indeed refer to the report which he wrote and dated August 6, 1979.

On August 6, Kirkconnell testified, he met with Friedman in the latter's office. Friedman handed him a handwritten sheet of paper entitled "Discussion of goals for Robert Kirkconnell" and asked him to sign it. Kirkconnell refused to sign until he had a chance to talk to his attorney, and Friedman noted that fact on the bottom of the page. The goals provided.

The following short term goals were prepared . . . in order for Bob to maintain his present performance rating of 4.

1. To meet agreed schedules and target dates.
2. Unless I approve otherwise to work on one assignment until that assignment is completed. Not to offer consultation in other areas and to restrict tangential investigations and activities.
3. To significantly improve working relationships with others, particularly by maintaining an even disposition and not offering free advice.

Friedman testified that he gave the goals to Kirkconnell after having shown them to Holt, and that he wished to discuss them but that Kirkconnell foreclosed discussion by saying he wanted to see his attorney. As a result, Friedman decided to distribute the goal sheet to certain members of management.

On the afternoon of August 6, Kirkconnell testified, the meeting took place with Wood, Jim Call (the industrial division environmental coordinator), Holt, Friedman, and himself in attendance. Wood opened the meeting by saying that the idea of reinjection wells was to be eliminated and that the project should be redirected back to surface disposal of the treated groundwater. The meeting lasted several hours, and Kirkconnell testified that he was assigned 14 tasks to perform. No time frame for completing this work was mentioned, and Kirkconnell testified it would take several months or 1 year to accomplish. He began to work on one of the tasks, however, telephoning information requested by Call in connection with negotiating the effluent permit.

On cross-examination, Kirkconnell was shown a memorandum dated August 6, 1979, entitled "Granulator Improvement,"<sup>42</sup> addressed to Friedman, Holt, Heausler, Stilson, Perry, and Wood. Kirkconnell testified that this memorandum, comprising 31 pages including engineering drawings and tables of analysis, was the rough draft mentioned in Friedman's August 2 note to Holt, but he maintained that it was a routine report being prepared over a period of time and not prepared for a specific meeting such as the one to be held on August 6, 1979. The report of August 6, 1979, in its rough draft form, contains a one-page abstract which dwells on the problems inherent in reinjection wells and concludes: "Spray ponding with surface disposal offers a much lower risk assessment than reinjection." The memorandum discusses

in detail the proposal to treat the groundwater and analyzes the properties of the water. It sets forth in detail studies that were done to test methods of removing  $\text{CCl}_4$  from groundwater. In this connection, the memo states that the  $\text{CCl}_4$  concentration in the groundwater "is estimated at 54 ppm." Under the topic "Meeting OSHA standards," the memo states that the subject is covered in a memorandum from Cooper to Friedman dated July 31, 1979. The methods of removing  $\text{CCl}_4$  from the groundwater which are discussed in the memo are spraying, air stripping, and weathering. Further spray tests to confirm the ability to reduce the level of  $\text{CCl}_4$  in groundwater are planned, as well as tests to investigate nozzle spacing. The memo also contains an analysis of four alternative treatment schemes, involving combinations of ponding, spraying, reinjection, filtration, and the like. Each of these schemes is illustrated on a drawing. One of the schemes, denominated Case III-032, calls for spraying, aerating, solids removal, and surface disposal. As to this scheme, the memo states that the "risk assessment is low" based on the probable ability to achieve the desired goal. The comment section of the memo discusses problems still to be solved concerning design of the proposed treatment pond and summarizes the high risks of failure associated with the reinjection well alternative. The conclusion is that Case III-032 offers a minimum of disadvantages.

Kirkconnell testified that before Cooper wrote his memorandum he spoke to Cooper and told him that the math model showed a range of  $\text{CCl}_4$  in air from 2.5 ppm to 56 ppm and asked Cooper for the standards and regulations applicable to the Le Moyne project. Cooper's memorandum, which Kirkconnell obtained from Friedman, refers to the figure 2.5 ppm but not to the higher numbers allegedly provided by Kirkconnell nor to the existence of any range of  $\text{CCl}_4$  concentration in air.

Kirkconnell testified that he never put ranges of  $\text{CCl}_4$  concentration in his memoranda and he never put in writing his concern that levels of  $\text{CCl}_4$  would exceed Government standards, because the Stauffer procedure is that where there is an infringement of law, it should be stated orally and not in writing. He stated that this had always been the policy but that it was specifically stated by Friedman at the July 31 meeting. Further, after his July 12 meeting with Holt, Kirkconnell testified, where he told Holt that there would be excessive levels of  $\text{CCl}_4$  in the air, "I was intensely aware that I was walking a narrow line."

I do not credit Kirkconnell's assertion that he did not put any fears or questions he had concerning employee exposure into writing because of a company policy against such actions. First, when Kirkconnell testified about the July 31, 1979, meeting, he clearly stated that Friedman's direction to omit sensitive environmental information from memos was a departure from previous practice which called for all factual information to be contained in a report, and provided that the document could be labeled "confidential" if necessary. Second, a reading of Kirkconnell's memoranda shows that he was not at all loath to convey dire messages about proposed projects where he thought warnings were justified. For

<sup>42</sup> This was a typographical error. The memo should have read "Groundwater Improvement." A number of other typographical errors are evident in this document.

example, Kirkconnell believed all along that the concept of reinjection wells was unworkable and he kept up a steady barrage of memos replete with statistics and reasoning to show that such wells, if adopted, would not function. He did not hesitate to make arguments relating to environmental problems in his attack on proposals he opposed; for instance, he repeatedly mentioned a noticeable red color that might result in the creek from improper methods of discharge of the effluent. I conclude that neither Kirkconnell's memoranda nor his oral communications contain fears about  $\text{CCl}_4$  and "ranges" of concentration because neither the fears nor the ranges ever existed.

At first maintaining that he himself presented no report at the August 6 meeting, Kirkconnell then testified that he could not remember and that he might have submitted the "rough draft" of August 6 on that date. Kirkconnell testified that he did not give a presentation at this meeting and that his report was not mentioned. He testified that he did not discuss the Copper report either at the meeting or in his own report nor did he mention that he disagreed with Cooper's conclusions because the "general policy in the Company, you do not put in writing sensitive material of this type, specifically at this time when my job was in jeopardy."

The Cooper memorandum, dated July 31, 1979, is a two-page document stamped "Stauffer Confidential" across both pages. It discusses vapor levels of  $\text{CCl}_4$  and  $\text{CS}_2$  "expected to result due to evaporation of these contaminants from the groundwater spray." The memo states "your model calculation . . . predicts approximately 2.5 ppm of carbon tetrachloride." The memo discusses the current standards for both of these vapors. It details the OSHA regulation (8-hour time weighted average at 10 ppm, ceiling level of 25 ppm and peak exposure not to exceed 5 minutes in any 4 hours of 200 ppm); the ACGIH recommendation (10 ppm for 8-hour time-weighted average and 20 ppm short-term exposure); and the NIOSH recommended 2 ppm ceiling exposure limit based on 60-minute sampling periods. The memo states that while the math model used to calculate the vapor concentration "may be inaccurate, it appears to provide the best estimate . . . available." Since the model predicts permissible levels and "approaches the levels currently being considered for future exposure limits," the "operation should not pose a problem." Further, "discussions with plant personnel and yourself indicate that operation of the evaporative spray systems would not require the continuous presence of an individual" and "operators would only be in the area for 1 to 2 hours per day, their average exposure . . . would be diluted." Acknowledging that future lower ceiling limits could pose a problem, the memo continues "this could be handled through the use of respirators during the time required for an employee to be in the immediate vicinity of the evaporative spray system." The memo concludes by giving the opinion that the project "does not present an unmanageable employee exposure potential." Upon having his attention drawn to the fact that the memo was stamped "Stauffer Confidential," Kirkconnell stated that

he could not remember whether he ever saw another document marked confidential in his years at Stauffer.<sup>43</sup>

After the meeting of August 6, Kirkconnell testified, the scope of the project changed dramatically and so did the work he was assigned to do. He immediately went to work on the new scope but was unable to complete the report he had been requested to furnish by August 13.

Wood testified that he called the August 6, 1979, meeting to evaluate current engineering recommendations for the Le Moyne project after having been told by Heausler that reinjection no longer seemed feasible. At the meeting, Kirkconnell read from a report which Wood then asked for. Although Kirkconnell was reluctant to give Wood a copy because the report was not complete and had typographical errors, he finally gave it to Wood at the latter's insistence. The report contained a copy of the letter from Cooper and this document was discussed at the meeting. Kirkconnell formally recommended abandoning the concept of reinjecting the treated groundwater and he suggested reverting to surface disposal.

Wood testified that after the meeting he told Holt that the project was way behind schedule and that action should be taken, and he wrote a memorandum to this effect dated August 10, 1979. Wood stated that commitments for dealing with the groundwater pollution had been made to AWIC and that he was eager to get the project underway.

Wood testified that at the August 6 meeting he noted that many nonprocess aspects of the project were not completed; further the decision as to which process would be used had not been made in July, as expected. Wood stated that he was not satisfied with those aspects of Kirkconnell's work related to nonprocess work such as cost estimates, and coordination of electrical and civil engineering work, but that only a little of the process design he had completed needed to be redone. Wood testified that the major change decided upon at the August 6 meeting concerned the method of disposing of the treated groundwater. However, the work done in methods of removing contaminants from the water was still valid and, in fact, surface discharge is simpler than reinjection and thus it simplified the process design. Wood did not request that Kirkconnell be removed from the job.

Concerning the "9" or "14" tasks listed by Kirkconnell as having been assigned at this meeting, Wood testified that many of these had been done by Kirkconnell and that all that was required was to document the old work or to compute or update costs of designs already made. Further, some of the tasks listed by Kirkconnell were not assigned to him at the August 6 meeting according to Wood's testimony. Heausler testified in great detail concerning each of the nine tasks listed by Kirkconnell, and he stated that most of the work listed had been done by Kirkconnell in 1978 and early 1979. All that remained was to document certain work that had been done, update costing that had been computed earlier or com-

<sup>43</sup> In this he again contradicted his earlier testimony about the use of "Confidential" memoranda.

plete certain details. Heausler believed the work could be done in a few days.

Holt testified that the August 6 meeting was relatively short, beginning at 1:30 and ending by 3:30. Kirkconnell had a rough draft of a report. Those present reviewed process flow designs for the alternative water treatments being considered. Call requested more information for the NPDES permit application and Kirkconnell promised to provide this within the week. Kirkconnell stated his conclusion that reinjection was not a feasible alternative. Wood had also expressed this conclusion to Holt some weeks before the meeting, and he repeated it on August 6. He also repeated that AWIC would get permitting authority in September or October, and that the best alternative was discharge to the Mobile River. After the meeting, Holt saw Wood in the hall, expressed his disappointment that the project was not close to the final AR stage, and stated that he would do something about that. Wood agreed that something had to be done.

Friedman testified that the meeting of August 6, 1979, was held to discuss the status of the Le Moyne groundwater project and the issuance of a final AR. He stated that Kirkconnell gave him a draft of his report prior to the meeting. Friedman told Kirkconnell that the draft contained typographical errors and that it was deficient in its discussion of costs for the alternative treatment plans. Friedman testified that at this meeting there was some discussion of further testing of the groundwater, but no discussion of testing levels of  $\text{CCl}_4$  concentration in the air. He stated that Wood made decisions as to what would be done to carry the project along.

I find that Kirkconnell was aware that his report on the groundwater project was due on August 6, 1979. I find that at the meeting, Wood accepted the treatment alternative recommended by Kirkconnell and that Kirkconnell was directed to provide certain further data and to update certain cost information. I do not find that 14, or 9, new tasks were assigned. Further, the idea of reinjection which had been strongly opposed by Kirkconnell was formally abandoned. I find that Kirkconnell did indeed deliver an oral report at this meeting based on his August 6 rough draft, and that the Cooper memo about OSHA standards was discussed. I find that Kirkconnell did not voice any concern about safety of employees or levels of  $\text{CCl}_4$ .

On August 8, Kirkconnell testified, he received a memorandum from Friedman summing up the results of the August 6 meeting. The memorandum stated that Wood had accepted preliminarily the concept of "discharge with iron removal" based on a flow sheet drawing. This is drawing 32 included in the August 6, 1979, report and is Case III-032, in that report, the treatment design stated by Kirkconnell to have a low risk and a minimum of disadvantages. A number of tasks to be performed by Wood, Call, and Holt were listed, and the following three tasks were listed for Kirkconnell: (1) issuance of Kirkconnell's report by August 13, including costs expected from estimating by August 7; (2) issuance of estimated effluent composition to Call and a material balance based on the flow sheet drawing; (3) sizing of the spray pond. The memo stated that an engineer would be assigned to Le Moyne to obtain data necessary for the

issuance of the AR. After he received this memorandum, Kirkconnell reached Friedman by telephone in California on August 9, and informed him that there would be a problem in releasing his report by August 13 because the cost department could not release its estimate in the required time due to the failure of the operating committee to meet and approve the estimate. Further, Kirkconnell told Friedman that he would require "a considerable study effort" to answer the questions raised at the meeting. In a memorandum written to summarize the conversation, Kirkconnell stated:

any changes in the cost study . . . pose a problem in completing and releasing my report on Monday 8/13/79.

Kirkconnell testified that the report he referred to above was not to be based on the rough draft of August 6, 1979, but he did not explain what report he was referring to. I conclude that it was indeed a reworking of the August 6 draft.

Friedman testified that Kirkconnell informed him of two things during the conversation: that it would take 2 more months of work to finish his report and that if Friedman removed the goal sheet from his file, he would not go to his lawyer. Kirkconnell denied telling Friedman that he would not call his attorney if Friedman removed the goals from his file, and he denied threatening to sue if the goals were not removed. However, he admitted mentioning Conrad Kent during this conversation, and the fact that he intended to write to him. Kent is employed in a legal capacity by Stauffer.

After speaking to Kirkconnell, Friedman telephoned Holt and left a message with Holt's secretary relaying the substance of his conversation with Kirkconnell.

#### 8. The discharge of Kirkconnell

On August 10, 1979, Holt met with Kirkconnell in the latter's office. Kirkconnell testified that Holt asked questions and took notes during this meeting. Holt asked about the report due on August 13, and Kirkconnell responded that there was a problem with releasing the cost estimate and that he had to perform many tasks. Holt replied that he would take care of the cost estimate release and the operating committee, and that the tasks mentioned by Kirkconnell were "engineering details." Holt told Kirkconnell to issue the report. Kirkconnell then stated that he "hadn't started to do the work for the basis for a report" and that it would be impossible to write the report for the date specified. Holt repeated his instruction to issue the report and left.

Holt testified that on either August 9 or 10, 1979, he received a telephone message from Friedman stating that Kirkconnell said there would be a 2-month delay in issuing his report and that Kirkconnell would contact Conrad Kent of the Stauffer Legal Department about filing charges against Friedman. The message also mentioned that the cost estimate could not be released until approved by the operating committee.

Holt testified that he spoke to Kirkconnell in the latter's office on August 10.<sup>44</sup> Holt was concerned about the delay in getting cost data on the steam stripping backup and he asked to see the data relating to steam stripping. Kirkconnell replied that the data were scattered throughout his office and that it would take 2 months to put everything together. The two men then discussed the proposed treatment pond, and Holt asked about the basis for sizing the pond, the aeration devices and the holding capacity required to diminish the  $\text{CCl}_4$  content to 50 ppm. According to Holt, Kirkconnell indicated that Holt should desist because Kirkconnell knew more about the subject and Holt did not know what he was talking about. During this meeting, Holt again asked for the protocol for future testing, but Kirkconnell did not have it. The types of testing Kirkconnell still deemed necessary as of August 10, included testing of the efficiency of spray devices and a determination of the amount of aeration or weathering required to reduce the concentration of  $\text{CCl}_4$  in the water to 50 ppm.<sup>45</sup> Following these comments by Kirkconnell, Holt informed him that he had asked Friedman to prepare the goals and that a reappraisal of Kirkconnell would take place. When Kirkconnell stated his belief that the goals were a subterfuge for discharging him, Holt replied that he was unhappy with his performance, that a reappraisal was necessary and that Kirkconnell should review the goals and add to them if he wished. Then Kirkconnell told Holt that he would bring charges against both Holt and Friedman.

Holt at first testified that during this talk, Kirkconnell told him to "shut up." However, Holt later changed his testimony to say that while Kirkconnell had not used these words, his attitude has been such as to indicate, in Holt's view, that he should shut up. Kirkconnell denied that he told Holt to "shut up" but did not deny any of Holt's other testimony concerning this meeting. I credit Holt's testimony.

From the testimony of both Holt and Kirkconnell, I find that the major issue discussed at this meeting was Kirkconnell's ability to release his report by August 13. Kirkconnell told Holt that it would take months to complete the report while Holt maintained that only "details" remained to be completed. Holt asked certain substantive questions of Kirkconnell relating to steam stripping aeration and the size of the pond. Holt also asked to see Kirkconnell's plans for future testing of spray devices and the like. Kirkconnell rebuffed Holt and spoke abruptly to him. Holt took offense and mentioned that Kirkconnell should consider the goals that Friedman had prepared and that Kirkconnell's performance was unsatisfactory. Kirkconnell mentioned his fear of being discharged and his intention to file some sort of charges. Holt testified that after talking to Kirkconnell on August 10, he returned to his office and prepared a memorandum of the meeting based on his notes. He then called Vice President Roberts, described the meeting, and told Roberts that he was very unhappy with the lack

of progress on the Le Moyne project and that Kirkconnell refused to be questioned by management and was reluctant to discuss any goals for himself. Roberts, referring specifically to Kirkconnell's attitude when questioned by management and then asked to consider goals, stated that this could not be condoned and that Kirkconnell should be terminated. Holt testified that he had not discussed terminating Kirkconnell with Friedman in July 1979 but that he had it in mind when he spoke to Roberts on August 10. Following his conversation with Roberts, Holt showed his memorandum to Mario Orlando, manager of administration and personnel, and directed him to take the steps necessary to effectuate Kirkconnell's termination. On August 13, Holt told Friedman about his meeting with Kirkconnell, and informed him that the latter was to be discharged.

Friedman testified that when he returned from California on August 13, Holt informed him that he had an "unsatisfactory" talk with Kirkconnell on August 10. Holt said that Kirkconnell would have to be replaced on the Le Moyne project because he was going to be discharged. Later, Friedman saw Roberts who told him that he had read Kirkconnell's files and that there was sufficient cause to discharge Kirkconnell. On August 15, Friedman, Orlando, and Carothers met to discuss termination procedures: it was decided to tell Kirkconnell that his discharge was for failure to work within the company structure and because he would not accept supervision.

Orlando testified that he is responsible for termination interviews and that he has jurisdiction over personnel files and the periodic employee merit reviews.<sup>46</sup> Orlando testified that on the afternoon of August 10, 1979, Holt informed him that Kirkconnell was to be terminated and asked him to make the necessary arrangements. Holt showed Orlando a note he had written after talking to Kirkconnell that morning. He told Orlando that he had discussed the termination with Roberts and that he would inform Friedman of the decision. Orlando arranged a meeting with William Carothers, the manager of employee relations, and Friedman to be held August 15. At that meeting, Kirkconnell's personnel file and periodic evaluations were reread and reviewed.<sup>47</sup> Orlando told Carothers that Kirkconnell was unable to work within the system and had been a problem for his supervisor from the beginning, and that "we were terminating him because we couldn't tolerate him any longer." The decision to terminate had been made by line management, including Friedman, Holt, and Roberts. Orlando told Carothers that the matter was sensitive because Kirkconnell had made reference to a lawsuit against Stauffer and Holt. Carothers concurred in the decision to discharge after reading the file and Holt's note. Orlando testified that Kirkconnell would not have been dis-

<sup>44</sup> During the conversation with Kirkconnell, Holt took notes in a notebook which he usually carries to meetings.

<sup>45</sup> Kirkconnell did not mention pumping the wells, nor did he raise any questions about levels of  $\text{CCl}_4$  at the spray site.

<sup>46</sup> Orlando testified carefully and his answers were direct and forthright on cross-examination. I find him to be a credible witness.

<sup>47</sup> Orlando testified that Kirkconnell was given yearly merit increases below the average increases given in those years from 1975 through 1979, except that he was given no increase in 1976 due to poor performance. Merit increases must be approved by Holt and Roberts. The last increase given was effective June 1, 1979.

charged but for the events which took place at the August 10 meeting between Kirkconnell and Holt.

Carothers testified that on August 10 or 13 he was asked to attend a meeting to be held on August 15, at which the termination of an engineer was to be discussed.<sup>48</sup> On August 15, he attended a meeting with Orlando and Friedman to review the background and to indicate whether he concurred in the proposed discharge of Kirkconnell. The three reviewed Kirkconnell's performance appraisals. Friedman told Carothers that Kirkconnell had been a problem employee since the beginning of his employment; he was difficult to supervise, argumentative, talkative, wanted to do things his way, and his performance was poor in that he did not complete his jobs when promised and always needed more time. Carothers testified that no particular incident was mentioned to him as precipitating the discharge and that there was no mention of regulatory agencies or the Le Moyne groundwater project.

On August 20, Orlando testified, Kirkconnell's termination meeting was held, with Friedman present. Friedman told Kirkconnell that he was terminated immediately for refusal to meet goals, fighting Friedman on instructions and interference with others. Kirkconnell said he would sue Stauffer or Holt, and stated either that he had been asked to perform illegal acts or to perform acts against company policy. He did not specify what these actions were. According to Kirkconnell, Friedman told him his discharge was "for failure to follow orders as directed."

When asked about Kirkconnell's contentions concerning his termination, Wood testified that Kirkconnell never told him that CCl<sub>4</sub> released into the air by the groundwater treatment Project would exceed concentrations of 10 ppm nor was he ever given a "range."<sup>49</sup> Indeed, Kirkconnell's reports to Wood said the concentration of CCl<sub>4</sub> in air at the treatment site would be 2.5 ppm or 3 ppm. Further, Wood stated that he had not been informed that Kirkconnell had raised questions concerning CCl<sub>4</sub> with Holt and Friedman, nor that Kirkconnell had asked for more testing of the CCl<sub>4</sub> which would be released into the atmosphere. Wood stated that he could not recall Kirkconnell saying at the August 6 meeting that the average CCl<sub>4</sub> content of the groundwater was over 54 ppm. He had thought the 54 ppm average was inaccurate when he first heard of it in spring 1979 based on the consultant's report, and he believed the 30 ppm average used in earlier reports was accurate. However, Heausler wanted the project designed to handle average CCl<sub>4</sub> concentrations in water of 54 ppm as this was the most conservative approach.<sup>50</sup>

<sup>48</sup> I find that Carothers was a credible witness and I shall rely on his testimony.

<sup>49</sup> Wood was not involved in Kirkconnell's discharge, and he learned about it only after it had taken place. Heausler also heard of the discharge only after it was decided upon; he received a telephone call from Friedman who stated that he would rather not talk about it.

<sup>50</sup> Heausler testified that when Kirkconnell showed him the method he had used to average the groundwater concentration of CCl<sub>4</sub> in April 1979, he told Kirkconnell that he believed the figure reached was too high.

Heausler testified that the consultants had predicted that after 6 months of operation, the groundwater treatment project would reduce concentrations of CCl<sub>4</sub> in the water to 15 ppm. This, coupled with steps the plant was taking to prevent further contamination of the groundwater, meant that the highest concentrations of CCl<sub>4</sub> would be pumped first and that there would be ever decreasing concentration of CCl<sub>4</sub> in the groundwater and thus in the air above the treatment site as the project continued to operate. Both Wood and Heausler believed that there would be no problems in meeting OSHA regulations, and even if the NIOSH recommended limit were adopted in a few years, there would likely be no problem. However, in case the project functioned differently than expected, Wood testified, he had requested that Kirkconnell include plans to retrofit a backup system involving recovery of CCl<sub>4</sub> and CS<sub>2</sub> at the treatment site without release of these vapors to the air. This was standard planning procedure at Stauffer.<sup>51</sup>

Holt's testimony about discussions of CCl<sub>4</sub> comports with that of Wood and Heausler. Thus, Holt testified that at the April 1979 planning meeting, Kirkconnell told him that the anticipated CCl<sub>4</sub> level at the spray site would be 3 ppm. Although, Kirkconnell apparently disagreed with Stilson's statement that the average CCl<sub>4</sub> content of the groundwater was 35 ppm, Holt refused to let Kirkconnell pump more observation wells to obtain more samples and told him to use the data available to compute average concentrations. I find that this direction resulted in Kirkconnell's memo of May 7, 1979, which stated for the first time that the average CCl<sub>4</sub> content of the groundwater was 54 ppm.

By the time of the July meeting, Kirkconnell did not request any further pumping of the observation wells according to the credible testimony, and it is clear that there was no controversy remaining over the average CCl<sub>4</sub> content of the groundwater. The disagreement in July 1979 between Holt and Kirkconnell was over the feasibility of reinjecting the treated groundwater. Moreover, none of the participants at the August 6, 1979, meeting, not even Kirkconnell, testified that Kirkconnell expressed any fears about levels of CCl<sub>4</sub> at this meeting.

Friedman testified that Kirkconnell was discharged because he did not get along with many people in the company, he was argumentative, he engaged in unauthorized tangential investigations, he could not meet agreed upon schedules, and he could not delegate work and wasted time doing unnecessary work. Friedman also testified that Kirkconnell's call to him in California lead him to recommend Kirkconnell's termination, but Friedman later altered this testimony and stated that Holt and Roberts had decided on termination without his own participation. When asked about Kirkconnell's employment history, Friedman acknowledged that in his performance evaluations of Kirkconnell in 1978 and 1979, he noted "improvement in supervisor relationships" and a continuation of efforts to adjust to the needs of the job. Kirkconnell maintained a rating of "4" throughout his tenure

<sup>51</sup> According to Heausler, and Wood, Kirkconnell had done the work designing for a retrofit in 1978, and all that was required was 1 day's work to update the cost figures.

at Stauffer, which was considered "average." Friedman's recollection about the specific events leading to Kirkconnell's discharge is inexact. However, Friedman's testimony about Kirkconnell's abrasive manner and about his inability to meet deadlines is uncontradicted and is supported by documentary evidence. Further, Zittel, who was friendly and helpful to Kirkconnell testified that on "numerous occasions" over the years of his employment at Stauffer, he had counseled Kirkconnell with respect to maintaining a cooperative relationship with his supervisors. Therefore, I find that Kirkconnell had a history of difficult relationships with his supervisors and that he also had a history of being unable to meet deadlines.

#### 9. Kirkconnell's letter to Davis

On August 13, Kirkconnell had written a letter to Ken Davis, the executive vice president of Stauffer. Although no evidence was presented linking Respondent's decision to discharge Kirkconnell with the receipt of this letter by Davis, its contents are instructive. The letter, marked personal and confidential, is headed by an "Abstract." The first paragraph of the abstract states that Friedman and Holt "have verbally ordered me to perform in a manner that is contrary to corporate policies and procedures, is illegal and against good engineering practice." The abstract then mentions the corporate image and a reduction in stock value, and concludes that Kirkconnell has been told that if he does not carry out "these verbal orders, they threaten to destroy my professional career. The information offered below the abstract is grouped under six headings.

Under the title "Destruction of Sensitive Material," the letter states that Friedman ordered the destruction of "sensitive environmental information" that was "potentially incriminating." Under the heading "Le Moyne Groundwater Pollution," the subject to which the most space is devoted, the letter summarizes a longstanding disagreement with Holt over the reinjection well concept. The first paragraph states that Holt ordered Kirkconnell to conduct the project in an "unprofessional mode" with procedures that presented "an unacceptable and unnecessary risk. I disagreed." There follows a description of the possible problems encountered in reinjection which would lead to plugging of the wells and an assertion that Holt would not permit Kirkconnell to obtain analysis and lab studies required to predict plugging problems but instead verbally ordered him to design the project. "I refused to follow [Holt's] direction without a written order establishing accountability. It is not legal to verbally order a subordinate to carry out an act that the subordinate states to be unprofessional and could reflect on his professional career." The letter next describes work performed by Kirkconnell on an Easter holiday weekend which resulted in his being able to demonstrate through analysis of data and laboratory tests that the "risk of plugging is high." After the submission of verbal and written reports, the letter states, "the reinjection concept has been dropped as of August 1979." The two concluding paragraphs state, in substance, that Kirkconnell's "recommendations of September 1978 for spray ponding and surface disposal have been accepted." "In addition to presenting a higher risk than spray pond-

ing, the cost for reinjection is about twice the cost of ponding with surface disposal. . . . The decision to study reinjection as an alternative was not of my choosing. . . . I have done my best to abort this reinjection effort from first knowledge of its inception. . . ."<sup>52</sup>

The next heading in the letter of August 13 is "Questionable Purchase Tactics;" it details a disagreement with Friedman over purchase of some water treatment equipment for the Chicago Heights plant during which Friedman "vigorously and loudly" suggested that Kirkconnell "should leave the company." Under the heading "Individual Productivity," the letter asserts that Friedman told his department members to "reduce work output, as an effort to reduce costs." Under "Departmental Goals and Objectives," the letter offers Kirkconnell's suggestions for saving money. Finally, under "General Comments," Kirkconnell offers to review similar problems at other company locations.

This letter, written by Kirkconnell after the level of disagreement between him and Holt had risen and when Kirkconnell had been told that he might be discharged, apparently sets forth all of his grievances against Stauffer. The purpose of the letter was obviously to make the strongest case possible for the view that Kirkconnell was a valuable and productive employee of Stauffer who had been unfairly treated and maligned by certain members of management. Yet the letter contains no mention at all of the circumstances which the General Counsel alleges were the cause of Kirkconnell's discharge. The letter does mention Kirkconnell's long fight to defeat the reinjection method of disposing of the treated groundwater and characterizes Holt's orders to Kirkconnell as "illegal" and "unprofessional;" however, there is no mention of any other illegality in connection with the Le Moyne project.

This letter leads me to the inescapable conclusion that at the time of his discharge, Kirkconnell was aware of no controversy between himself and Holt over the amount of  $\text{CCl}_4$  in the groundwater or over the possible concentration of  $\text{CCl}_4$  in air at the treatment site, and that Kirkconnell did not believe that any disagreement he may have had with members of management over  $\text{CCl}_4$  was in any way relevant to his discharge. If Kirkconnell had been aware when he wrote the August 13 letter to Davis of any danger to employees from  $\text{CCl}_4$ , he could not have failed to include this information in the letter.

Thus, I find that the letter is one more indication that Kirkconnell had no belief that there would be dangerous levels of  $\text{CCl}_4$  vapor at Le Moyne, and that he had no knowledge of any actions or expressions of concern on his part that may have led to any conflict with Stauffer management over levels of  $\text{CCl}_4$ .

My conclusion is supported also by a memorandum written by Kirkconnell on August 14, 1979, for the purpose of giving Heausler a status report on the Le Moyne project. Under the final section entitled "Comments," the memorandum discussed the fact that costs have changed since estimates were made in 1978. The cost of operating a carbon unit was given in 1978 based on a concentration

<sup>52</sup> There is no mention of  $\text{CCl}_4$  in this topic, nor in any other part of the letter. Nor is there any mention of the health or safety of employees.



of  $\text{CCl}_4$  in the groundwater of only 30 ppm and a final standard to be met equal to 1 ppm, where as now the standard for the effluent will be 50 ppm and the groundwater concentration of  $\text{CCl}_4$  "has been more accurately estimated . . . to be 53 ppm. . . ." There is no mention here of high levels of  $\text{CCl}_4$ .

### C. The Chlorine Gas Incident

On a Thursday afternoon, in late September 1978, Kirkconnell testified, he inhaled some chlorine gas outside the plant at Le Moyne and blacked out for a few moments.<sup>53</sup> He returned home, and when he saw his doctor the next Monday, the latter ordered some hospital tests. Kirkconnell filed a reimbursement claim for medical bills with Stauffer, but he was told by John Williamson, the office manager, to resubmit the claim and denote it a claim for influenza. Kirkconnell then resubmitted the claim in accordance with these instructions.

On cross-examination, when asked whether his doctor had in fact confirmed that his illness was the result of the chlorine gas, Kirkconnell did not testify that his doctor had diagnosed exposure to chlorine gas. Instead, Kirkconnell stated his doctor asked him to sit down because "the last man that came into his office that had been exposed to chlorine died in the spot where I was standing . . . [and said] I want you to go to the hospital for extensive tests to determine the degree of damage." There is thus no evidence in the record that Kirkconnell was medically diagnosed as suffering from poisoning by chlorine gas. There is also no evidence as to any medically determined "degree of damage." The bills submitted into evidence show that Kirkconnell was seen in his doctor's office on September 26, 1978, a Tuesday, and that certain laboratory tests and X-rays were performed by the hospital on an outpatient basis on the next day, September 27, 1978, a Wednesday. Kirkconnell did not clarify the discrepancy between these dates and his testimony.

Williamson testified that he had heard that Kirkconnell might have inhaled chlorine gas and that he made some inquiries about this. When Kirkconnell returned to the office, and saw Williamson, Kirkconnell said his doctor had stated the illness was probably a virus. Kirkconnell nevertheless submitted a claim for a work-related injury. Since the claim was inconsistent with Kirkconnell's prior statements, Williamson asked him to resubmit the claim on the proper basis and Kirkconnell complied.

Williamson testified concerning a memorandum he prepared when he first spoke to Kirkconnell about the possibility that he might have inhaled chlorine gas. The memorandum, dated September 29, 1978, supports Williamson's version of these events, including the fact that Kirkconnell reported his doctor's diagnosis that the illness was a virus infection rather than the result of breathing chlorine gas fumes. Williamson testified that if Kirkconnell had indeed been ill due to the effects of chlorine gas, he would have processed the appropriate forms for reimbursement for job-related injury.

<sup>53</sup> Kirkconnell testified that after he inhaled the first whiff of chlorine gas he did not put his gas mask on because he did not think it was dangerous. On the General Counsel's rebuttal, Kirkconnell changed his testimony and placed this incident on Friday, September 22, 1978.

Kirkconnell denied that his doctor had diagnosed a respiratory virus infection, and denied telling anyone he had a respiratory flu.

Kirkconnell's recollection of this episode is not very good and his testimony showed some confusion as to the sequence of events. In addition, I find it hard to credit his assertion that he was poisoned by chlorine gas since he avoided testifying that that was his doctor's diagnosis, and since he waited 4 or 5 days before seeing his doctor after the alleged incident and 5 or 6 days before undergoing the laboratory tests and X-rays. If the diagnosis of chlorine gas poisoning had indeed been made, Kirkconnell would surely have recalled this fact and would have been able to give clear and unambiguous testimony about it.

Based on the documentary evidence and on Williamson's and Kirkconnell's testimony, I do not find that Kirkconnell was ordered to falsify his claim for reimbursement. I find that Kirkconnell told Williamson that his doctor had not diagnosed chlorine gas poisoning but instead had concluded that there was a probable virus infection.<sup>54</sup>

The General Counsel introduced evidence as to the chlorine gas incident as background in an attempt to establish that Respondent was indifferent to the health and safety concerns of its employees and had a propensity to cover up safety related incidents. I find that there is no record evidence that Respondent had any such tendencies as were suggested by the General Counsel.<sup>55</sup>

### D. Conclusions as to Kirkconnell's Discharge

From the record before me, I am convinced that any questions Kirkconnell raised concerning  $\text{CCl}_4$  and the need to determine with greater accuracy the amount of that chemical in the groundwater were abandoned by April 1979. I find that he was not in any conflict with his superiors over the concentrations of  $\text{CCl}_4$  in late spring and summer 1979. Further, I find that there is no evidence that he refused to continue designing the treatment project because of safety concerns on his part. It seems from the evidence before me that all those who had been involved in the Le Moyne project had considered the safety aspects of the design, including anticipated levels of  $\text{CCl}_4$  in the groundwater and at the treatment site, and had concluded that the levels of  $\text{CCl}_4$  posed no safety risk to employees. Kirkconnell's memoranda do not express any disagreement with the consensus that the project would meet OSHA regulations. Even his earlier memoranda, written when he was still maintaining the desirability of obtaining more data on the content of the

<sup>54</sup> Kirkconnell testified that other engineers had told him of ill effects from working at Le Moyne, but I do not credit that testimony.

<sup>55</sup> The General Counsel and counsel for the Charging Party rely on an internal memorandum dated July 11, 1979, summarizing Stauffer's business strategy for 1980. It is claimed that this document shows a wish to avoid governmental health and safety regulatory standards and cut corners generally. However, a reading of this memorandum in context shows that the subject addressed is internal Stauffer "red tape; proceduralism: excessive paperwork" and the like, and that the aim is to speed up decision making and permit the taking of business risks involving the commitment of money. However, there is absolutely no suggestion in this document that any other type of risk, such as a health risk, is to be taken by Stauffer.

groundwater, do not contain any warnings about safety violations.

The credible testimony and the memoranda prepared by Kirkconnell himself show that his wish to pump the wells at Le Moyne continuously and obtain more readings with which to compute average  $\text{CCl}_4$  concentration in the groundwater was expressed in spring 1979. The record also shows that Kirkconnell received a salary increase on June 1, 1979. By the time Kirkconnell prepared his memoranda of July and August 1979, he was no longer engaged in any disagreement with Holt about the amount of  $\text{CCl}_4$  in the groundwater. However, he was still maintaining his oral and written battle against the use of reinjection wells. On the set of facts described above, I cannot find that the issue of  $\text{CCl}_4$  was related to Kirkconnell's discharge.

Kirkconnell's testimony during this hearing was incorrect on a number of major points. Although Kirkconnell denied knowing the standard for worker exposure to  $\text{CCl}_4$ , his memoranda show that he was aware of OSHA regulations from an early point in the project. Although Kirkconnell denied recommending the use of a spray pond, his memoranda show he originated and promoted this method. Although Kirkconnell denied being assigned to write a major report for the August 6, 1979, meeting, he later admitted that he knew a report was due. Although he denied being counseled about meeting deadlines and controlling his temper, his employment records show that he was repeatedly so counseled. Although Kirkconnell testified that he discussed his fears about  $\text{CCl}_4$  with employees at the plant, there is no reliable evidence over 400 ppm of  $\text{CCl}_4$  and would thus lead to large concentrations of  $\text{CCl}_4$  vapor at the treatment site, his memoranda show that he was satisfied that the average  $\text{CCl}_4$  content of the groundwater was at most 54 ppm and that the vapor at the site would not exceed 3 ppm. There is thus no evidence that Kirkconnell believed, or expressed a belief, that concentrations of  $\text{CCl}_4$  vapor at the Le Moyne plant would exceed OSHA regulations or endanger the health and safety of employees.

Counsel for the Charging Party urges that Kirkconnell "refused to perform two work assignments because of his workplace, health and safety concerns." The first refusal is asserted to be the refusal to state in a report that the groundwater would be fully treated in 2 years. Although Kirkconnell did refuse to write this report, there is absolutely no evidence in the record to show that this refusal was in any way related to his discharge. The second refusal is said to have occurred when Kirkconnell "actually declined to design the Le Moyne groundwater project." This assertion is not supported by the record in the instant case. Kirkconnell did not refuse to design the Le Moyne project; he had substantially completed the design by the August 6, 1979, meeting, and at that meeting Wood accepted the alternative design recommended by Kirkconnell in his memorandum, shown on drawing 32 attached to the memorandum. Further, rather than trying to slow down completion of the project, it is clear that Kirkconnell was trying to finish his work as quickly as possible. He mentioned to Zittel his concern about not having his report finished in time for the August meeting; further, Kirkconnell testified that immediately after

the conclusion of the August 6 meeting he began performing the tasks assigned to him at the meeting so that design of the project would proceed and the final appropriations request could be prepared.

In summary, I find that Kirkconnell did not voice any complaints or fears about employee exposure to  $\text{CCl}_4$  as his work on the Le Moyne project progressed to completion, and I find that he did not refuse to perform any work because of complaints or fears related to employee safety. Thus, I find that Kirkconnell did not engage in concerted activity under the rationale of *Alleluia Cushion*, *supra*.

The General Counsel has not met the burden of proving, *prima facie*, that Kirkconnell was discharged for concerted activities. Indeed, I find that Kirkconnell did not engage in the concerted activities as alleged by the General Counsel. Therefore, I need not perform the analysis set forth in *Wright Line, a Division of Wright Line, Inc.*, 251 NLRB 1083 (1980), as to dual motive or pretextual reason for discharge. It is clear that Kirkconnell was discharged because he had offended Holt and Friedman, because they believed he was uncooperative and arrogant, and because they blamed him for a certain lack of progress. Whether the termination was justified or whether Kirkconnell was the victim of corporate politics is a speculation not required for purposes of this decision.<sup>56</sup>

I conclude that Kirkconnell's discharge did not violate Section 8(a)(1) of the Act.

#### E. Contacts With Government Agencies

Kirkconnell testified that, in January or February 1977, Friedman assigned him to work on a problem relating to the effluent water at the Le Moyne plant. Kirkconnell had some doubts about the method being used to measure total suspended solids in the effluent because he thought the readings being obtained were too high, and he called the TAFT research center of the EPA to ask if there were any new permissible filtration techniques he could adopt. He did learn of such a technique, and he wrote a memorandum giving the details to Friedman. Friedman then asked Kirkconnell where he had gotten the information, and upon hearing about the source, he instructed Kirkconnell not to contact any regulatory agencies and in the future to get information from regulatory agencies by going through company channels, that is, through the Stauffer Department of Environmental Control headed by Ed Conant. Kirkconnell's reply to Friedman was that this was a highly technical question and that Conant would not grasp the significance of the answer.

Palmer, since 1976 the chief chemist at Le Moyne, testified that he recalled asking for Kirkconnell's help in connection with a problem in measuring total suspended solids in the effluent at the plant. Kirkconnell suggested using a rinse before measuring the solids and suggested calling someone he knew at EPA to confirm his method. It was decided at the plant that Kirkconnell should make

<sup>56</sup> See *Bay State Gas Company*, 255 NLRB 708 (1981).

the call, and the plant eventually adopted the new method.

In January 1977, Kirkconnell testified, he breathed a quantity of hydrogen sulfide ( $H_2S$ ) emanating from a lined pond at the Le Moyne plant and suffered some physical effects. The plant engineers determined that the level of  $H_2S$  was 8 or 9 ppm in the air, and Kirkconnell was informed that the permissible level was 10 ppm. Kirkconnell was not satisfied with this information, however, and he called NIOSH and spoke to Paul Kaplan who informed him that the OSHA 8-hour standard was indeed 10 ppm. A few days after this, when Kirkconnell was back in Dobbs Ferry, Friedman reminded Kirkconnell not to contact regulatory agencies directly. When asked about this incident, Friedman could not recall it specifically but he agreed that he "undoubtedly" told Kirkconnell to obtain his information through channels.

Friedman testified that there is no formal company policy concerning information contacts with regulatory agencies, but that he made a "request" that when employees seek information concerning government regulations and standards, they inform him and the Stauffer Environmental Control Department before proceeding. Friedman recalled discussing this with Kirkconnell in connection with the suspended solids problem in 1977, but he did not believe it related to Kirkconnell's discharge in 1979.

Friedman testified that he wrote a memorandum dated June 3, 1975, to the engineers in his department which stated: "It is the function and concern of the Environmental Control Department to make contacts with any pollution control authority, be it state, Federal, county, local or otherwise." The memo requests that Friedman be informed before an engineer contacts any pollution control authority with respect to Stauffer's environmental affairs. Friedman testified that the memorandum is still in effect.

Friedman testified that the official Stauffer policy was set forth in two letters dated respectively June 5 and July 14, 1978, which were sent to all employees at home. The first letter deals with Stauffer's "Environmental Compliance Policy" as well as with "OSHA Workplace Standards." The memorandum provides for compliance planning, emergency reporting of noncompliance incidents and an environmental audit by the Stauffer Department of Environmental Services. The memorandum concludes with the admonition that employees will be judged to have failed and will be subject to severe discipline if they do not comply with existing regulations and permits affecting Stauffer. The memorandum clearly establishes that a "specific incident" of noncompliance will be reported directly to the appropriate regulatory agency where "mandated by regulations," although other reports are to be cleared with the Stauffer environmental department. The second letter establishes reporting procedures to enable "individual employees to fulfill their reporting obligations under the Toxic Substances Control Act." The "Company Policy" is stated to be "prompt disclosure within the Company by all employees of information of potential hazards to human health or the environment. . . ." The memorandum requires individual employees aware of such potential hazards "immediately"

to report them to certain stated individuals, and steps are provided for carrying the process through the reporting requirements including advice to the reporting individual of the ultimate actions taken. This memorandum does not mention direct contacts with government agencies.

Respondent asserts that the Stauffer policy enunciated in the two letters described above, "is designed simply to encourage internal reporting of possible violations of environmental, safety and health laws and regulations." Respondent urges that the policy does not prohibit reports directly to a governmental agency but instead that it "obliges employees who are given specific reporting assignments to carry out such assignments. . . ." As to Friedman's requests that Kirkconnell not contact regulation agencies directly but instead seek information of government regulations through the Stauffer environmental control department, Respondent argues that this was done "to avoid confusing opinions and to assure unanimity in directions for compliance with . . . regulations."

It is clear that the two letters do not prohibit employees from contacting government agencies concerning safety and health matters relating to the workplace. Their object is to assure that employees fulfill their duties under the law to prevent noncompliance with applicable regulations and permits, and to report any incidents of noncompliance. The aim of the memoranda, in sum, is to enable Stauffer management to prevent breaches of the law by prescribing certain internal methods of orderly management and accountability.

A different question is presented with respect to Friedman's request that information about government standards be obtained through Stauffer channels and that Friedman be notified before direct contacts with government agencies were to be made. Friedman testified that he had told Kirkconnell of this requirement, that he had issued a memorandum concerning it to all engineers under his supervision and that his directive was still in effect. This directive applied to Kirkconnell's call to NIOSH concerning safety standards for worker exposure to  $H_2S$ .<sup>57</sup>

Thus, according to Kirkconnell's and Friedman's testimony, Respondent maintained a rule that employees were not to contact government agencies directly for information, including information related to health and safety standards for the workplace. *Alleluia* related to health and safety standards for the workplace. *Alleluia Cushion, supra*, establishes that a sole employee engages in concerted activities when he contacts a government agency to enforce occupational safety regulations which protect his fellow employees unless those fellow employees disavow the sole employee's actions. If under *Alleluia Cushion* it constitutes interference with the employee's

<sup>57</sup> It is clear that Kirkconnell's direct contacts with government agencies were not the cause of his discharge since there is no evidence in the record to show that Holt, Roberts, or Carothers considered these contacts in reaching their decision or indeed that they were even aware of them. Apparently, Kirkconnell's personnel file contained no reference to his calls to government agencies. Kirkconnell's calls to NIOSH took place in 1977 and 1978; Kirkconnell received salary increases after these contacts and no warnings about them appear in any of the goals established for him in counseling sessions held thereafter.

Section 7 rights under the Act to discipline him in retaliation for contacting the government agency, then it must also constitute interference with an employee's Section 7 rights to maintain a rule prohibiting the employee from contacting the government agency to enforce occupational safety standards.

Although Respondent maintains that its rule requiring OSHA standards to be obtained through channels was adopted only to avoid confusing opinions and assure unanimity in compliance with OSHA regulations, it is clear that the rule has the broad effect of barring direct employee communication with any occupational safety agency for any reason. Under *Alleluia Cushion*, this is an unlawful result. Moreover, the rule impermissibly conditions the exercise of employees' Section 7 rights concerted to protect the safety of the workplace on the knowledge and assistance of the employer.<sup>58</sup>

Respondent has not shown that if its employees call government agencies directly to obtain occupational safety standards they will obtain confusing or contradictory answers. In the instant case, Kirkconnell's call to NIOSH confirmed the information he had received from the Le Moyne plant to the effect that the 8-hour standard for H<sub>2</sub>S was 10 ppm, and no confusion or other deleterious effect to Respondent's business was shown to have occurred.

<sup>58</sup> See *AMC Air Conditioning Co.*, 232 NLRB 283, 284 (1977).

Accordingly, I find that by maintaining a rule which prohibits employees from contacting government agencies directly for information relating to occupational safety and health standards Respondent violated Section 8(a)(1) of the Act.<sup>59</sup>

#### CONCLUSIONS OF LAW

1. Stauffer Chemical Company is an employer engaged in commerce within the meaning of Section 2(6) and (7) of the Act.

2. By maintaining a rule which prohibits employees from contacting government agencies directly for information relating to occupational safety and health standards, Respondent interfered with and restrained employees in violation of Section 8(a)(1) of the Act.

3. The aforesaid unfair labor practice affects commerce within the meaning of Section 2(6) and (7) of the Act.

4. No other violations of the Act were committed.

#### THE REMEDY

Having found that Stauffer Chemical Company has engaged in an unfair labor practice, I shall recommend that it cease and desist therefrom and that it take certain affirmative action to effectuate the policies of the Act.

[Recommended Order omitted from publication.]

<sup>59</sup> Cf. *Ultrad Corporation*, 185 NLRB 434 (1970), enfd. as modified 454 F.2d 520 (1971).